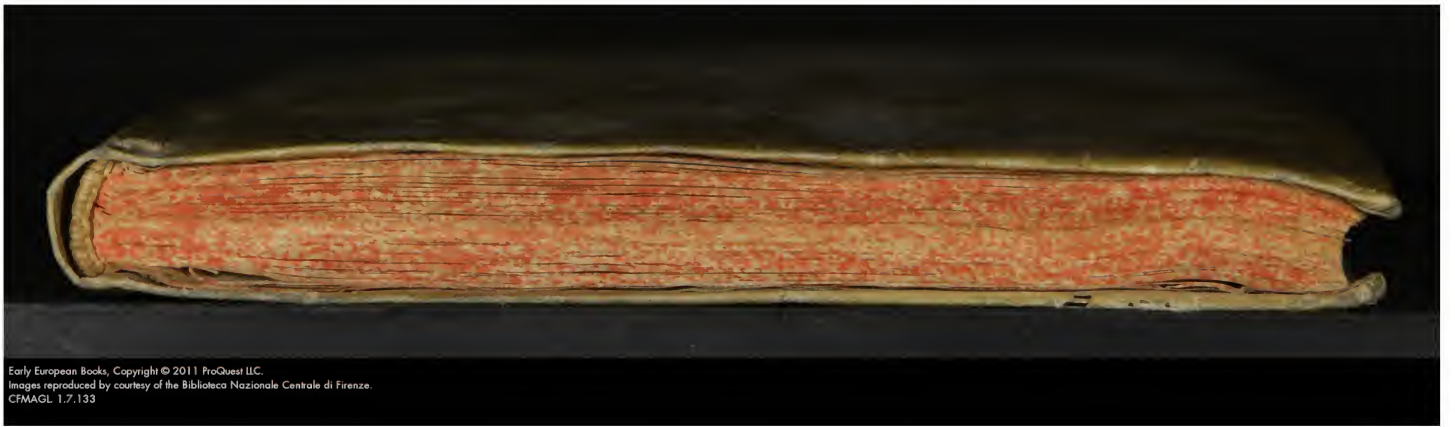


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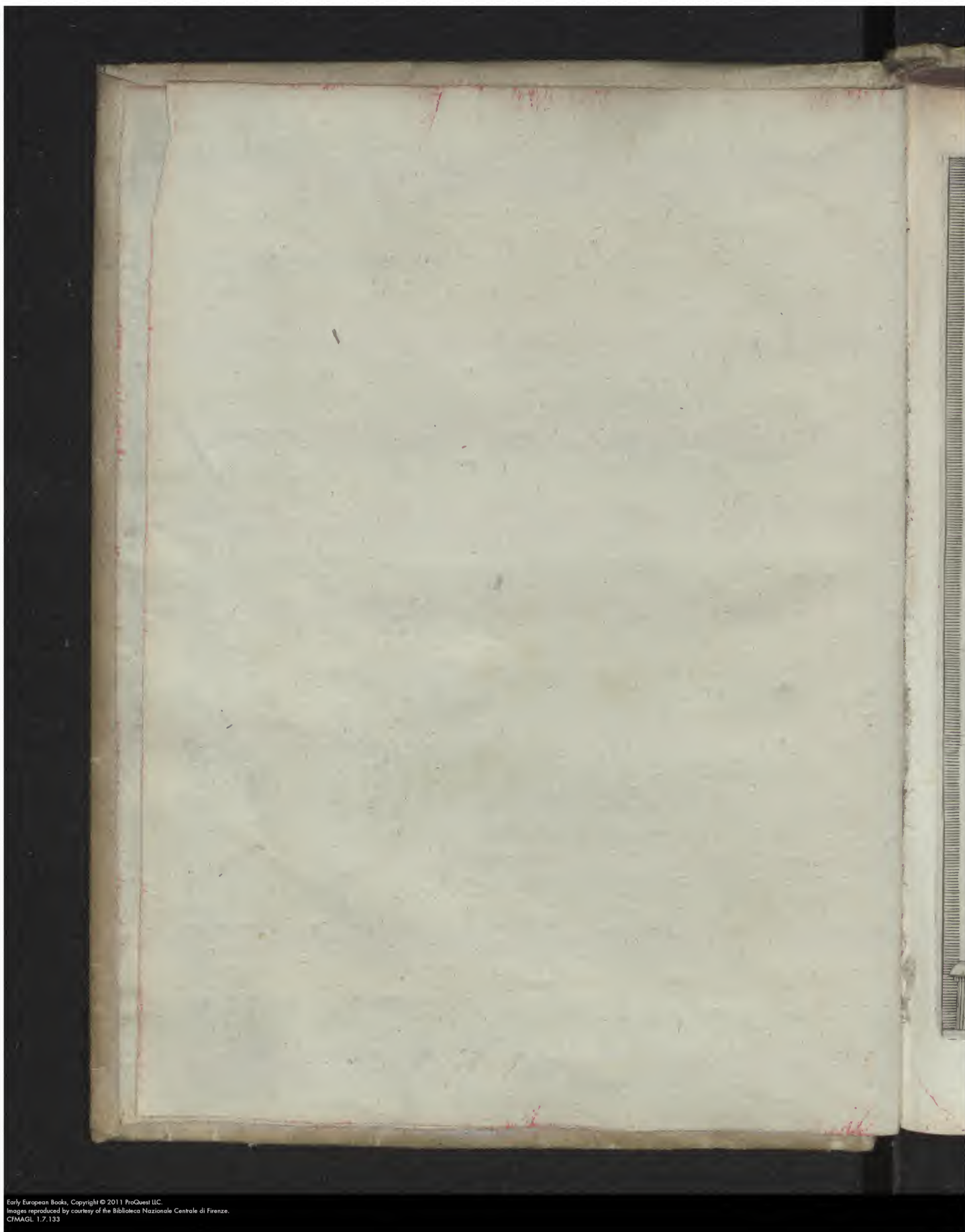


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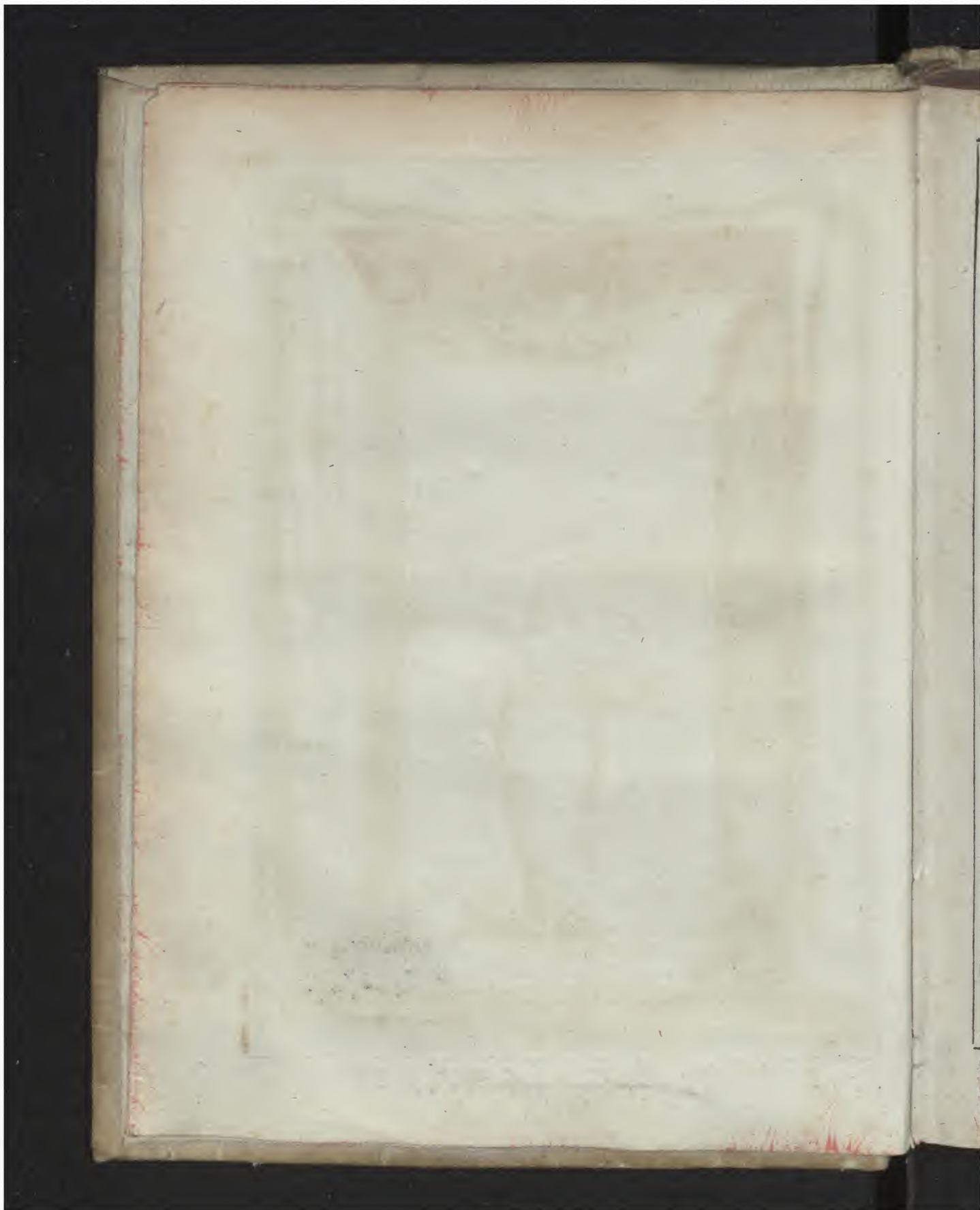
1. 7. 133

XI
CAVAL





Giovanni Battista Piranesi.



TRIGONOMETRIA
PLANA, ET SPHÆRICA,
Linearis, & Logarithmica.

H O C E S T

Tam per Sinuum, Tangentium, & Secantium multiplicationem, ac diuisionem iuxta Veteres:

*Quam per Logarithmorum simplicem ferè additionem
iuxta Recentiores;*

Ad Triangulorum dimetiendos angulos,
& latera procedens.

*Cum Canone duplici Trigonometrico, & Chiliade Numerorum absolutorum ab 1 vsque ad 1000, eorumque Logarithmis,
ac differentijs.*

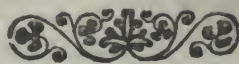
Opusculum Vniuersæ Mathesi vtilissimum:

Omniumq; terrestrium, ac caelestium dimensionum Promptuarium.

AVCTORE FR. BONAVENTVRA CAVALERIO
MEDIOLANENSI,

Ordinis Iesuatorum Sancti Hieronymi:

*Ac in Almo Bononiensi Gymnasio Primario Mathematicarum
Professore.*



BONONIÆ, Typis Hæredis Victorij Benatij. 1643. Superiorum permisso.

TRIANGULUM

PLANUM ET SPHERICUM

LIBER PRIMUS

DE TRIANGULIS

LIBER SECUNDUS

DE TRIANGULIS

LIBER TERTIUS

DE TRIANGULIS

LIBER QUARTUS

DE TRIANGULIS

LIBER QUINTUS

DE TRIANGULIS

LIBER SEXTUS

DE TRIANGULIS

LIBER SEPTIMUS

DE TRIANGULIS

LIBER OCTAVUS

DE TRIANGULIS

LIBER NONUS

DE TRIANGULIS

LIBER DECIMUS

DE TRIANGULIS

LIBER UNDICESIMUS

DE TRIANGULIS

LIBER DUODECIMUS

DE TRIANGULIS

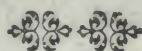
LIBER TRICESIMUS

DE TRIANGULIS



ILLVSTRISSIMO DOMINO
D. COM. ALEXANDRO
BENTIVOLO

Patrono maximè Colendo.



Elitescebat in tenebris hæc ingloria lucubratio Adm. R. P. Bonaurenturæ Cauterij, eruditissimi, ac solertissimi viri, in Bononien. Archigymnasio Mathematicarum artium professoris, quam cum mundo luculentam exhibere operæ pretium esset, Auctori renuenti suffragari statueram, ne suo, suiq; conditoris splendore careret; etenim celata virtus latera nescit Lyrico teste, & dignum laude virum musa vetat mori: ille tamen iocosi furti præsciis, & meæ voluntatis non ignarus hoc me gratissimo munere affecit. Enim verò quid mihi iucundius contingere poterat, quam per op-

portuna facultas Alexandri illius colendi, cuius si nomen
perpendas *HOMINIS AUXILIVM* referas, sin fa-
cta, virum Alexandri Seueri Imperatoris munificentiae
prodigij vestigia imitantem intuearis, & Magni Alexan-
dri liberalitatis oraculi amulantem opera fateare? Silere
mihi liceat generis claritatem, ac Familia excellentiam ubi-
que celeberrimam, siquidem Ouidij sententia.

Et genus, & proavos, & quæ non fecimus ipsi,
Vix ea nostra voco &c.

Prodit ergò hoc Opusculum plurimis tibi nominibus debi-
tum, præcipuè vero ob innumera tua erga me merita, quo-
rum obliuionem capere non nisi sinè summa ingrati animi
nota liceret. Excipe igitur Illustriss. Com. deuotam hanc
animi mei alacritatem, ac obsequium, memoriaq; recale non
minus esse Regium paruula accipere, quam largiri magna.
Perge quoq; de me, meaq; Religione, uti soles bene mereri,
quæ & tibi, & Familia tua à celesti benignitate omnia bona
studiosissimè deprecari non desinit. Diutissimè Vale.

Bonon. Die 18. Mensis Aprilis 1643.

Illustriss. Dominationis tuæ

Addictiss. Seruus
Fr. Sigismundus Pellegrius
Ord. Iesuatorum.

P R Æ-

P R Æ F A T I O.



Vm plures ex discipulis, & amicis meis, quibus præcipuè celestium luminum diu Vrania inspirauit amorem; Trigonometriæ studium aggressi; Tabulas nedum Logarithmorum, sed & Sinuum, Tangentium, & Secantium, tanquam primigenias, experiri summopere exoptarent: pauca verò earum Exemplaria hic habeantur: omnium votis postulabatur, vt in commune eorum commodum (quod alibi toties factum est) & in hac Alma Studiorum Matre imprimerentur. Vt ergo communieorum voluntati pro meo munere satisfaceret, easdem simul cum Logarithmicis, sub hac forma concinnatas iam vt publici iuris fierent destinaueram, non parum ad hoc & huiusmodi typorum elegantia alliciente. Cum verò præsens Opusculum non ita pridem discipulis meis tradidissem, vt vtramq; calculandi methodum, nempe nedum per Logarithmos, sed & per Sinus, Tangentes, & Secantes, summariamq; totius Trigonometriæ doctrinam in eodem, tanquam in quodam Enchyridio collectam, in promptu haberent: hoc vt eisdem Tabulis (ne ipsæ nudæ in lucem exirent) præmitteretur enixe flagitarunt. At cum circa hoc doctrinæ genus & Directorium, & Praxim Astrologicam, cum eius Appendice pro Directionibus per Logarithmos conficiendis, Problematum Centuriam, ac Compendium Trigonometricarum Regularum per Logarithmos (quæ quatuor Opuscula in vno volumine colligantur) iam in publicam vtilitatem protulissem, ne adum agere, seu per eandem lineam ferram reciprocare viderer, aliud quidquam superaddere superfluum dijudicabam. Verum cum in ipso Directorio quamplurimos errores, propter iniquam temporis conditionem, quo impressum est, nempe hic pestilentia grassante, irrepsisse: reliqua verò Opuscula tantum Regulas Logarithmicas exhibere considerarem (vt quod hic nouum inueniet Studiosus, nunc præteream,) idcirco eorum, ac præcipuè P. Sigismundi Pellegrij nostri Ordinis Mathematicarum cultoris (cuius industriæ, ac diligentia circa illius emendatam, quantum potuit, impressionem impensæ non parum debet Leçtor) precibus flexus, hoc vt ipsis Tabulis adiungeretur negare non potui. Porro quanti ipsa Trigonometria sit momenti ad vniuersam Matheſim rectè excolendam satis me in dicti Directorij Præfatione explicasse puto, vt non sint ibi fusius dicta hic denuò repetenda. Hoc vnum verò Studioſis in memoriam reuocare sufficiat nihil ferè esse in Astronomia, Geographia, Gnomonica, Altimetria, Perspectiua, Architectura tam Ciuili, quam Militari, alijsq; non paucis Mathematicarum Scientiarum riuulis, quod ex Trigonometria tãquam ex vberissimo fonte non deriuetur. Ita vt quemadmodum Dialectica ad Physicas disciplinas, & ad leges Instituta, sic ad præfata omnia ritè capeſſenda vnice Trigonometria nos instruere possit. Hinc mirum non est eruditioribus tanto illam in-

pretio

pretio habitam fuisse, ut iugiter in eiusdem cultura strenuè laborauerint. Huic rei illustre admodum nobis testimonium præbet Astronomiæ Principis Almagestum: non enim alijs lapidibus, quam Trigonometricis tantum Aedificium constructum apparet. Hoc idem Copernici Opus de Revolutionibus Orbium, Tychonis Progymnasmata, aliorumq; huiusmodi Virorum monimenta declarant, quorum doctrina non alijs, quam Trigonometriæ filis cernitur contexta. In quorum voluminibus iocundi exercitij occasionem habebit calculator, si huius Opusculi Regulas eorum Quæstis applicuerit; quorum magnam illi suppellectilem præcipuè Maginus in suo Primo Mobili pro exercenda Trigonometria Sphærica suppeditabit, in cuius Problematibus consulo ut de his Regulis, præsertim Logarithmicis, periculum faciat, non enim sine magna animi oblectatione, & admiratione intelliget, quantò adhibitis ibidem Regulis præstent Logarithmicæ. Mitto per Trigonometriam difficiliore aliquas, ac inter Philosophos, & Astronomos celebriores Quæstiones, ut de Parallaxi, ac loco Cometarum, nouorumq; Syderum: de situ macularum in Sole: de Lunari asperitate: de vtriusque Luminaris Eclipsibus: de Cœli corruptibilitate, vel incorruptibilitate: de huius Vniuersi genuina partium constitutione: deq; alijs scitu mirabilibus, quibus selectiora tantum ingenia perfruuntur, per vnicam Trigonometriam ritè dissolui posse. Accipe ergo hilari vultu, benigne Lector, præfatis Tabulis adiectum hoc Opusculum, quantitate paruum; at quod tua cultum industria in immensam molem excrecere potest. Nec enim terrestribus hisce cancellis Trigonometria coeretur, sed altiora petens, & corporis, & mentis oculis viam parat, qua vniuersa Cœlorum spatia, leuioribus, quam Dædalæis pen- nis suffulti Studiosi, peruolare valeant.

A D M O N I T I O

Circa Auctorem Centrobarycæ.



Rursusquam autem vltius procedam, occasione impressionis huius Opusculi, de quadam re Lectorem hic opportunè præmonendum esse duxi, quæ licet ad Trigonometriam non pertineat, nequaquam tamen silentio prætereunda est, cum ad meæ Geometriæ defensionem spectet, quam octo ab hinc Annis in publicam vtilitatem promulgavi. Cum ergo hæc Trigonometria ad vmbilicum ferè ducta esset, apparuit hic Centrobaryca Pauli Guldini è Societate Iesu, in quatuor Libros distributa, quorum primus Anno 1635, tres verò posteriores Anno 1640 Viennæ Austriæ impressi fuerunt; materiam continens Centri grauitatis nedum planarum superficierum, & corporum; sed & non planarum, linearum, atq; punctorum, quibus Antiquorum circa hoc inuenta gloriosè cumulare contendit, cui idcirco

inter

inter eximios Geometriæ cultores promeritas laudes nequaquam denegandas esse fateor. Cum verò præfatos Libros pro temporis angustia auidè perlegerem, Inuentionemq; Centri grauitatis, necnon Vsum, Fructum, & Gloriam eiusdem perlustrarem, plures insimul reperi ab hoc Auctore censoria virga notari. Inter quos præcipuè Albertus Durerus, David Rinaltus, Lansbergius, Longomontanus, Keplerus, Vitellio, & quod mirum est ipsi summi Geometriæ Principes Euclides, & Archimedes ennumerantur. Quapropter minimè miratus sum, cum tandem nec memet ab illius districtiori iudicio immunem abire potuisse animaduerti. Quamuis, vt verum fatear, nescio an hunc verum, vel potius fictum, meum Antagonistam apellem. Verum quidem declarant contra meâ Arcem geometricam, noua quadam ratione Indiuisibilibus constructâ, iacta tela, ictus non pauci ad mœnia concutienda, defossi cuniculi ad illius euertenda fundamenta. At fictum persuadet non indictum apertè bellum, illumque sæpè sæpius protestari, se nihil contra me determinare, vt in sequentibus locis manifestò declarat. In Indice enim rerum præcipuarum Tomi secundi, littera, B, fatetur se meâ Geometriæ septem Libros, quos sibi discutiendos proposuerat, accuratè perlegere non potuisse, vnde nec de illis quidquam statuere. Similiter Pag. 4 de mea methodo Indiuisibilium subiungit. *Eam tamen, propter rationes hic minimè importuno silentio supprimendas, respuendam non censeo.* Pag. 331 pariter hæc habet in parenthesi (*de Caualerij modo hic quicquam decisum volo, rem in aliud tempus, si Deus vitam, ac sanitatem dederit, reseruans*) Et Pag. 349. *Maximè cum hac inquisitio facta non sit, protestor, ad confundendum, aut supprimendum Auctorem, quem magni facimus &c.* Deniq; Pag. 350 sic concludit. *Sed vt finem tandem desideratum aliquando attingamus, cum bona pace & Archimedis, & Euclidis, quos singulari honore (si tamen aliqualem censuram excipias) prosecuti sumus: immò & Pappi Alexandrini, quem præteriuimus, Kepleri etiam, & Caualerij, quos vt amicos tractauimus, huic Libro quarto, & toti Operi de Centro grauitatis finem imponimus.* At, qualiscunque sit hic meus Antagonista, dic quaeso, benigne Lector, si rationes in eiusdem Lib. 4 Cap. 5. contra meam nouam Geometriam Indiuisibilibus promotam ab ipso allatæ, ipsummet Auctorem ita conuincere non potuerunt, vt definitiuam contra eandem proferret sententiam, illiq; nigrum Theta præfigeret, nunquid hoc apud alios earundem vi obtinere poterit? Sed dices meam doctrinam accuratiori disquisitioni reseruata fuisse, vt pluribus in locis affirmat, at ab huius posterioris Tomi impressione triennium ferè iam elapsum est (doli autem per tantum temporis spatium me hunc latuisse) nec quidquam tale adhuc visum fuit. Sed forsan allatis iam ab eo dubitationibus responsum expectat: aut fortè meorum septem Librorum propositiones accuratius perlustrans, nullamq; falsam animaduertens, iudicium, ac sententiam suspendit, ne palinodiam canere, aut talionis pœnam subire cogeretur. Si enim (qualitercunque mea Principia probauerim) conclusiones ab illis deductæ veræ dignoscuntur, quia cum aliorum inuentis, ac minimè dubijs concordant (vt easdem accuratè

exami-

examinanti innotescet) iam apud hunc Auctorem sufficienter mea Principia probata erunt, nempe ab inductione. Siquidem hoc sufficere innuit idem Auctor dum maximum suæ Geometriæ fundamentum (quod quidem pulcherrimum esse non inficior, locoque dignum, in quo natum est: quid enim aliud ab Hesperidum Hortis, quam Mala aurea expectari possunt?) non aliter ipse probat. Sic enim de eodem inquit Pag. 146. *Neque alia demonstratione res hæc indiget; sed sufficet per inductionem hoc ipsum si non in singulis, in plerisque; saltem, quas describemus, ac componemus Potestatibus ostendere, aut certe quod nostra inuenta, cum alijs aliorum aliter demonstratis præcisè conveniant, innuere, vel tacitè etiam periti Geometriæ iudicio id relinquere: Genuina meherclè, etiam si alia non suppeteret, pro mei defensione responsio; cur enim meæ Geometriæ ea denegabit privilegia, quibus ipse utitur in sua? cur non utraq; eadem trutina pensandæ erunt? Cur legem non patietur, quam ipse tulerit? Sed hæc obiter, & quasi per transennam, ac pro futura responsione præludij loco à me nunc dicta sint. Interim ipsum Auctorem rogo, ut accuratius meos Libros videat, namque posterioribus melioribus, forsitan antica exclusum, postica recipiet. Sua quoque diligentiori examine iterum perlustrare dignetur, etiam enim ad Aristophanis, & Cleanthis lucernam elaborata agnoscantur, nec tamen in eo aliquod videtur deesse aliquali censura dignum, ut suo loco clarius ostendetur. Denique allatis ab eo dubitationibus, necnon & ijs, quæ in accuratiori disquisitione referantur (si quamprimum & ipsæ venient) responsionem, candide Lector, expecta.*



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in su.

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D. O. M.

Doctrinarum Perfectæ Dyadi,
 Totius scilicet humanæ Intelligibilitatis Intelligentiæ
 TRIGONOMETRICÆ FACULTATI
 Hæ paginæ Sacræ sunt.

Illius numerosa serie non serò, sed serò
 Atq; varia in inclinatione non vltra, nec citra rectum

Lector

Immensa cœlorum spatia arctissimè complecti,
 Punctalemq; latissimè spatium per tellurem
 Ter, simul & vnicè valebis.

Tantoq; scientialis maiestatis summis ab Apicibus,
 Apollineo ceu è Tripode

Cunctilcius euades:

Non alia, Aedepol, quam angulari hac minime salebrosa via
 Ad impenetrabilitatem vsq; peruenies,

Quinimò solis inuictissimis Mathematicum instructus argumentis
 Monstruosam falsi gigantomachiam tutissimè superabis.

Huc ergò mentem animumq; studiosè aduortas.

Et dona ampla feres, quæis grates mox gratus ingentissimas
 Doctissimo, & Eruditissimo Patri Bonauenturæ Cauallerio Archigymnasij Bonon. Professore
 Eminentis Mathematicorum Coryphæo Ingenuitatis Genio,
 Scientifici laboris ingenio.

Qui

Altissimum ascensum incredibili facilitate complanauit,

Extremos terminos admirabilissimè conciliauit,

Omniaq; pulcherrima tractabilitate absolutissimè compleuit,

Referes semper.

Papyraceus hic Lapis.

Cen verius Ouidius Mont' Albanus Philosophorum, & Mathematicorum.

Minimus scientialem in stuporem erga tantum sapientis.

Merita versus

Tibei

Perpetuas hæc excitatorias ad virtutem notas immobiliter exhibet.

Vale.



Vbi

Trino

Numini.

Eximio viro

Bonaventuræ

Cavallero Matheseos

In florentissimo Bononia

Archigymnasio Primario

Professori, omnium consensu

Doctorem subtilissimo, & admirando.

Ter docto : Ter acuto : Ter maximo

Logarithmicis Tabulis doctrinam Trigonometricam,

Sapientissima in sæculum liberalitate, profundenti.

Disce, Lector, solo Trigono laudes infinitas Cavallerij metiri

Solo enim Trigono infinitum commensurabile novit humanitas.

Disce tot glorias illi debitas esse, quot numeros Doctrina Logarithmica

In suis sine carētib; ac abditis in immensitatis Chaos recessibus cōplectitur

Illius igitur Famæ, solo Trinoq; venerabili, Trinā hanc Pyramidē graculabundus P.

Virbius

Tronchius.

Excellentissimo Trigonometriæ Auctori.

H E X A S T I C O N.

TELLURIS quicunq; cupis, Cœliuè rescire
Quæque, Cauallerius te docet arte noua.

Qui ex vno Trinoq; Deo sibi Trigona sumpsit,
Quidni mensuret plasmata cuncta Dei?

Trimetra quòd tantum diuinus sciuerit Auctor,
Olli Trina laus, sitq; Corona Triplex.

C. B. I. P.

De

*De Trigonometria Adm. R. P. F. Bonauentura Cauallerij Primarij
Matheſeos Profeſſoris in Almo Bononienuſi
Archigymnaſio.*

Quid valeat, Lector, quæſis ſi docta Matheſis,
Hunc librum ſpectes: omnia Trinus habet.
Seu luſtrare velis cœleſtes Aſtra per orbes,
Cum gradibuſq; Domoſ: omnia Trinus habet.
Aut cupias altos, feriunt qui nubila montes
Metiri immenſoſ: omnia Trinus habet.
Seu ducenda tibi ſit linea perſpectivæ,
Ritè vt perficias: omnia Trinus habet.
Dædalus aut optes cellaſ ad ſydera moleſ
Aedificare novaſ: omnia Trinus habet.
Mœnia ſeu condas, quæ ſint tutamen ab hoſte,
Marte ciente viroſ: omnia Trinus habet.
Optica ſeu libeat, ſeu te Geographica ſcire,
Vt doceare modoſ, omnia Trinus habet.
Iure Cavallerio hæc igitur, qui dogmata tradidit,
Si omnia Trinus habet, Gloria trina datur.

Io. Baptiſta Capponi Phil. & Med.

CÆSARIS PEDRINI.

G R T P H V S.

Maxima qui numeri deſcribis munera Terni,
Ter terniſ numeris ſat numerare nequiſ.

DEL

DEL SIG. OLARCO TIAMO.

S'allude all'Architettura Militare.

Godi Felsina pur, godi sicura,
 Mentre il nouo Archimede,
 Ch' in tè ferma la sede
 Del gran Siracusan le glorie oscura:
 Giusto è ben, che togliendo
 Tè da' mortali offese, e sè da Morte,
 Se lo vince in saper, lo vinca in sorte.

Dell'Animoso Acc. Gelato.

Non più questa Terrena, e vasta mole
 Vanta vn' immensurabile grandezza:
 Non più del Mar la tumida alterezza
 La sua profondità celar ci vuole.
 I moti suoi non più ci asconde il Sole,
 O'l ria Vecchion la Stupida lunghezza:
 Non più l'humano ardir Giove disprezza,
 Con quei, che lasciar l'ire vnqua non suole.
 Non più del Ciel per sconosciuta via
 Or nel Boreo Zodiaco, or ne l'Austrino
 Stella ò rapidi, ò tardi i passi inuia.
 Or che ci mostra vn' huom quasi diuino,
 Che, s' iui andasse il guardo, anche potria
 Giunger l'Empiro a misurare il Trino.

Errores in Prosa corrigendi: pro quibus citantur initia versuum, seu linearum illius paginae, in qua reperiuntur.

Pag.	Linea.	Lege.	Pag.	Linea.	Lege.
9	posteriores	prius	40	Anguli	Z P S.
9	cupis	Dele r	40	Ipsius	agnosces
9	08633	ipsius	41	vel	Ref. Log. 2
11	Hrc	mirè	48	9. 14.	9. 14. 56 ^N
15	mus	notas	49	Cafus maior,	dimidij. S B, S P,
15	dio,	statue	49	Cafus minoris,	dimidij. S B, S P,
15	versus	decruncetur	50	grad.	80. 47. 32 ^N
19	tem	quam	52	bebis	vel per Canonem
21	lum,	Dele, non	58	deleat	is adiunctus
23	angula	cadent	59	dare.	quius
27	sumenda	capies	70	guli:	Subiunge hic immediatè post duo puncta hac
33	dam,	quinimodò	verba per parenthesis. (hic si sit minor		
36	ad	septimam	femiangulo verticali, perpendiculari cadit intra; sin maior, extra)		
36	ergo	tertium	Vide dicta in Epilogo Pag. 71 Not. ultimo circa Prob. 10		
38	Colligitur quintò	Subiunge, quod	Trigonometria Spherica.		
40	Z P.	notificati.			

Errata in Canone, & Chiliade, sic corrigenda.

In sinistris faciebus.

Gr.	Lege.
0. 33. 30.	Mef. 798878. 46
1. 3.	Leg. 816304. 24
1. 38	Sin. 2850. 32
2. 14	Sin. 3896. 91
3. 48	Sec. 100220. 34
6. 4	Sin. 10568. 56
6. 32	Leg. 905607. 06
7. 16	Sec. 100809. 69
8. 6	Leg. 914891. 48
8. 20	Mef. 916577. 37
8. 36	Tang. 15123. 58
9. 28	Sec. 101380. 65
9. 31	Mef. 922438. 19
10. 31	Mef. 926867. 14
11. 26	Tom. 1000876. 48
11. 34	Sin. 20050. 80
12. 0	Sin. 20791. 17
15. 24	Sin. 26555. 62
16. 6	Tom. 1001737. 64
20. 45	Tang. 37889. 61
22. 21	Mef. 981400. 00
23. 54	Mef. 964654. 00
32. 0	Leg. 972420. 97
32. 2	Leg. 972461. 38
35. 37	Leg. 976519. 11
36. 9	Mef. 986365. 00
38. 10	Tang. 78598. 08
38. 17	Sin. 61955. 07
39. 27	Tom. 1011228. 18
43. 26	Sec. 137707. 89

In dextris faciebus.

Gr.	Lege.
86. 31	Sec. 1645868. 61
86. 28	Mef. 1118931. 66
86. 7	Tom. 1116925. 05
84. 27	Sin. 99522. 22
84. 13	Mef. 1099446. 60
84. 12	Mef. 1099320. 76
84. 11	Tom. 1099419. 47
84. 10	Tom. 1099049. 64
83. 26	Mef. 1003887. 03
80. 26	Tom. 1079464. 55
80. 14	Tom. 1077048. 15
76. 52	Tang. 425594. 72
75. 40	Leg. 998626. 63
74. 4	Leg. 998298. 62
73. 37	Tang. 340136. 12
73. 26	Mef. 1052654. 28
72. 39	Tom. 1052548. 08
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67. 30	Tang. 241421. 36
58. 22	Tom. 1028027. 00
55. 38	Mef. 1016503. 27
53. 3	Tang. 132945. 71
53. 56	Sec. 169858. 25
52. 23	Sec. 163833. 55
50. 52	Tang. 122003. 81
47. 15	Tom. 1016825. 77

In Chiliade.

Nu. 317 | Lege, 250105. 93

TRIGONOMETRIÆ

Linearis, ac Logarithmica

PARS PRIOR

De communibus eiusdem fundamentis:
specialiter autem de Plana.

Definitiones, ac Principia vniuersæ Trigonometria
communia.

Triangulum. I.

Quid sit la-
tera trianguli
angulos
subtendere.



RIANGVLVM est figura ex tribus lateribus, ac tribus angulis constans. Vt in prima, secunda, tertia, & quarta figura sunt triangula, ABC , DEF , GHI , KLM : in quibus quoduis latus, vt, AB , dicitur subtendere angulum sibi oppositum, vt, ACB , & sic in reliquis, &c.

Trigonometria.

II. TRIGONOMETRIA est doctrina de dimensione triangulorum, qua ex angulis cognitis ignota latera, vel ex lateribus cognitis ignoti anguli, & mixtim artificiosè arguuntur, seu dignoscuntur.

Triangulum planum, & sphericum.

III. TRIANGVLVM duplex est, aliud planum, & aliud sphericum. Triangulum planum est, quod ex tribus constat rectis lineis, quæ eius latera dicuntur. Triangulum sphericum definitur in huius Tractatus posteriori Parte. Vt in prima, & secunda figura sunt plana triangula, ABC , DEF , & in tertia, & quarta sunt spherica, GHI , KLM .

Trigonometria plana, & spherica.

IV. HINC Trigonometria quoque duplex est, nempe plana, quæ circa triangula plana; & spherica, quæ circa triangula spherica versatur. De plana autem in huius Tractatus hac priorie Parte, de spherica verò in posteriori agendum erit.

Triangulum planum rectangulum, & obliquangulum.

V. TRIANGVLVM planum aliud est rectangulum, & aliud obliquangulum. Rectangulum est, quod habet vnum angulum rectum. Obliquangulum, quod nullum habet angulum rectum. Vt in prima figura rectangulum est, ACB , & in secunda obliquangulum, DEF .

Triangulum planum æquilaterum, æquilaterum, aut Isosceles, & Scalenum.

VI. SIMILITER triangulum planum vel est æquilaterum, quod nempe habet tria latera æqualia; vel æquicrurum, aut Isosceles, quod duo tantum: aut Scalenum, quod habet omnia latera inæqualia.

VII. IN triangulis planis rectangulis latus subtendens angulum rectum speciatim dicitur. Hypotenusa: includentia vero rectum, crura vocantur. Vt in prima figura erunt, AB , hypotenusa, & AC , CB , crura.

In Triangulis rectangulis hypotenusa, crura.

VIII. AT in obliquangulis duo quæuis latera possunt accipi tanquam crura, & tunc latus tertium est basis, cui angulus oppositus dicitur verticalis. Vt in triangulo, DEF , secunda figura, si supponatur, FDE , vt crura erit, FE , basis, & D , angulus verticalis: at si pro cruribus accipiantur, DF , FE , erit, DE , basis, & F , angulus verticalis.

In obliquangulis crura, basis, & angulus verticalis.

IX. OMNIS circulus diuiditur in gradus 360, singuli gradus in 60 minuta, vnum minutum in totidem secunda, &c. quæ sic notari solent. Vt gr. 25. 12'. 17" &c. significant gradus 25, minuta 12, secunda 17, &c.

Gradus, minuta, secunda, &c.

X. ANGVLVS cuiusvis plani rectilinei mensura, seu quantitas est arcus circuli ex angulari puncto, ad quoduis interuallum descripti, inter anguli crura comprehensus. Vt in quinta figura anguli, LOM , quantitas est arcus, NI , vel, AD , qui spectant ad circulos, ECD , $BGHI$, centro, O , utriusque descriptos: in quibus diametri, CD , EF , BH , GI , se secant ad angulos rectos. Ex quibus innotebit, quod si arcus, NI , vel, AD , fuerit gradus 20, etiam subtensus ab eisdem angulis, LOM , erit gradus 20: si illi gr. 30, & iste gr. 30, &c. Vnde cum arcus, ED , sit gr. 90, etiam, EOD , angulus rectus erit gr. 90, & duo recti, COE , EOD , gr. 180, & quatuor recti gr. 360. Quæ ergo de arcibus dicuntur, eadem & de subtensis vt sic ab eisdem angulis, & contra subintelligenda erunt, cum eodem numero graduū, & minutorum, &c. numerentur.

Anguli rectilinei quantitas.

Elicitur ex ultima sexti Elem.

XI. COMPLEMENTVM arcus minoris, quam gr. 90, vel anguli est eius differentia infra, vel supra gr. 90. Vt in quinta figura,

Arcus, vel anguli complementum, est minor.

A

EA,

<p>noti quidem ipso quadran- te, defectus ab eodē, ma- ioris autem, excessus su- pra eundem quadrantem, hoc est supra gr. 90.</p>	<p>E A, est complementum tantum, A D, arcus, quam A E C; ipsius quidem, A D, est defectus ab E D, qui est gr. 90; at pro, A E C, est excessus supra, E C, pariter gr. 90. Sic angulus, E O A, est complementum nedum ipsius, A O D, acuti, sed etiam obtusi, A O C. Unde si arcus, A D, vel angulus, A O D, sit gr. 20, eius complemen- tum erit, A E, vel, A O E, gr. 70: si ille sit gr. 35. 14', A E, vel, A O E, erit gr. 54. 46'. Et si, A E C, vel, A O C, fuerit gr. 120; comple- mentum, E A, vel, E O A, erit gr. 30: ut & graduum 132. 45' complementum erunt gr. 42. 45', &c.</p>	<p>contactus. Ut ipsius arcus, A M, vel anguli, A O M, Secans est, O E. Similiter ipsius, M D, vel, M O D, Secans est, O G. Non sunt autem Tangentes, & Secantes arcuum, vel angulo- rum quadrante maiorum: quia ex gr. punctum, G, non potest tantum eleuari, ut, O G, perue- niat ad, O A; vel, E, tantum deprimi, ut, O E, perueniat ad, O D.</p>	<p>Tangentes, & Secantes non sunt arcuum, vel angulorum supra gr. 90.</p>
<p>Supplementum est residuum arcus, vel an- guli ad semi- circulum, hoc est ad gr. 80.</p>	<p>XII. SUPPLEMENTVM arcus mino- ris, quam gr. 180, vel anguli est residuum eiusdem ad gr. 180. Ut in quinta figura ipsius arcus, A D, ut gr. 20, supplementum est arcus, A E C, grad. 160, & e contra: veluti acuti, D O A, supplementum est obtusus, A O C, & e contra. Hinc complementum alicuius an- guli, vel arcus, ut, E A, ipsius, A D, est etiam complementum eius supplementi, A C.</p>	<p>XVII. SINVS versus, Antiquis sagitta arcus, &c. est portio diametri inter eiusdem Sinum, & peripheriam contenta, qui ideò est tam arcus, &c. quadrante minoris, quanti maioris vsque ad gr. 180. Ut, A H, est sinus versus arcus, A M, vel anguli, A O M: H C, est sinus versus ipsius, M D C, vel, M O C: ut & D I, ipsius, M D, vel, M O D: & I B, ip- sius, M A B, vel, M O B.</p>	<p>Sinus versus, qui est arcus, vel angulorum tam infra quam supra gr. 90, vsq; ad gr. 180.</p>
<p>Trigonome- tria linearis.</p>	<p>XIII. QVATVOR linearum generibus vitur Trigonometria, nempe Sinibus, Tan- gentibus, Secantibus, ac Sinibus versis: quam ideò Trigonometriam linearem appello, et si ipsam prout numeris exprimuntur uti soleat.</p>	<p>XVIII. SINVS, Tangens, Secans, & Sin- us versus secundus, seu complementi pro- positi arcus, vel anguli, est, qui spectat ad eiusdem arcus, vel anguli complementum. Ut pro arcu, A M, Sinus est, M H, sed sinus se- cundus, seu complementi est, M I; Tangens se- cunda, D G, Secans secunda, O G. & Sinus versus secundus, I D: quia his spectant ad ar- cuius, M D, seu angulum, M O D, complementa prædictorum. Ita visum ipsius, M D, vel, M O D, Sinus secundus est, H M, Tangens se- cunda, A E, Secans secunda, O E, & Sinus versus secunda, A H. Recordare autem Sinum sec- undum, vel anguli supra gr. 90, ut ipsius, M A B, vel, M O B, esse sinum excessus supra quadran- tem, nempe est, M H, Tangentem secunda, A E, Se- cantem secunda, O E, & Sinum versus secunda, A H. Ut grad. 112. 25' Sinus sec. Tangens sec. &c. erit Sinus, Tangens, &c. graduum 22. 25' ex- cessus supra quadrantem.</p>	<p>Sinus secundus, Tangens sec- &c.</p>
<p>Sinus.</p>	<p>XIV. SINVS arcus, vel eidem subtensi anguli (qui etiam sinus rectus dici solet) est dimidium subtense, hoc est chorda dupli- arcus. Vel est perpendicularis cadens ab vno extremo arcus in diametrum circuli ab alte- ro extremo eiusdem arcus protensa. Ut in sexta figura centro, O, sit descriptus circulus, A B C D, per diametrum, A C, E D, sedus in quatuor quadrantes, in quorum cuiusq; arcu, ut, A D, sit assumptum quodcumq; punctum, M, a quo ducatur, M P, parallela, D B, secans, A C, in, H, & peripheriam in, P. Ergo sub- tensa, P M, dicitur chorda arcus, P A M, ac, P C M: & eius dimidium, H M, sinus arcus, A M, dimidi, P A M: & sinus arcus, M C, dimidi, M C P, vel sinus angulorum, A O M, M O C; qui ab, M, extremo arcus, A M, vel, M C, ducitur perpendicularis super diametrum, A C, per alterum extremum, A, vel, C, pro- tensam iuxta posteriorem definitionem. Sic, ducta, M I, perpendiculari ipsi, B D, est eadem, M I, sinus arcus, M D, &, M B, seu angulorum, M O D, M O B. Vides ergo eundem sinum con- uenire duobus arcibus semicirculum implenti- bus, etenim utriusq; definitio sinus adaptatur.</p>	<p>XIX. RADIVS est cuiuscumq; circuli se- midiameter, qui est omnium Sinuum maxi- mus, nempe Sinus graduum 90, & propte- rea ab aliquibus dicitur etiam, Sinus inter- ger, vel Sinus totus. Ut, O D, Sinus arcus, A D, vel anguli recti, A O D, grad. 90, seu illi aqualis, O M, vel, O A, est Radius circuli, A B C D, qui in sequenti Tabula intelligitur sestus in particulas aequales 1000000.</p>	<p>Nota pro Si- nus secundus, &c. arcuum, vel angulorum supra 90.</p>
<p>Chorda.</p>	<p>XV. TANGENS arcus, vel eidem sub- tensi anguli, est recta circulum tangens in vno extremo ipsius arcus, inter punctum contactus, & productam à centro per aliud extremum intercepta. Ut, stante eodem pun- cto, M, si per ipsum ab, O, indefinitè extenda- tur, O Q; tangens vero circulum, A B C D, in punctis, A D, recta, A E, D R, indefini- tasque ipsi, O Q, incident in, E G: erit, A E, Tangens arcus, A M, seu anguli, A O M; & D G, Tangens ipsius, M D, vel, M O D.</p>	<p>XX. CANON triangulorum, seu trigo- nometricus, est Tabula, in qua statuto cu- iusvis circuli Radio, ut, O D, exempli gra- tia particularum 1000000, vel 100000 (quo in sequentibus ut plurimum facilitatis gra- tia venitur) seu plurium, aut pauciorum pro libito cipharum, exhibentur omnes Sinus, Tangentes, & Secantes (exclusis Sinibus versis, cum hi ex Sinibus, ut patebit, facile deduci possint) communiter ad singulos gradus, & minuta quadrantis, relatiue ad suppositum Radium: & hoc in gratiam di- mensionis triangulorum, quorum latera, seu anguli ope dictarum linearum artificiose mensurantur, ut manifestum erit. Sic ergo in sequenti Tabula, seu Canone assumpto Ra- dio, O D, particularum 100000 (relictis dua- bus ciphis) si proponatur ex gr. arcus, A M, vel angulus, A O M, graduum 20. 15', in eadem in- uenietur, H M, Sinum ipsius, A M, vel angu- li, A O M, esse earundem particularum 34612</p>	<p>Radius, Sinus integer, Sin- us totus, qui est Sinus gra- duum 90, seu anguli recti.</p>
<p>3. Tertij Ele- mento.</p>	<p>XVI. SECANS arcus, &c. est intercepta inter centrum circuli, & Tangentem, tran- siens per extremum arcus, in quo non fit</p>	<p>XXI. CANON triangulorum, seu trigo- nometricus, est Tabula, in qua statuto cu- iusvis circuli Radio, ut, O D, exempli gra- tia particularum 1000000, vel 100000 (quo in sequentibus ut plurimum facilitatis gra- tia venitur) seu plurium, aut pauciorum pro libito cipharum, exhibentur omnes Sinus, Tangentes, & Secantes (exclusis Sinibus versis, cum hi ex Sinibus, ut patebit, facile deduci possint) communiter ad singulos gradus, & minuta quadrantis, relatiue ad suppositum Radium: & hoc in gratiam di- mensionis triangulorum, quorum latera, seu anguli ope dictarum linearum artificiose mensurantur, ut manifestum erit. Sic ergo in sequenti Tabula, seu Canone assumpto Ra- dio, O D, particularum 100000 (relictis dua- bus ciphis) si proponatur ex gr. arcus, A M, vel angulus, A O M, graduum 20. 15', in eadem in- uenietur, H M, Sinum ipsius, A M, vel angu- li, A O M, esse earundem particularum 34612</p>	<p>Canon trian- gulorum, seu trigonome- tricus.</p>
<p>Idē Sinus est dari arcus, vel anguli, & eius sup- plementis; ut gr. 30, & gr. 150.</p>	<p>Tangens.</p>	<p>XXII. CANON triangulorum, seu trigo- nometricus, est Tabula, in qua statuto cu- iusvis circuli Radio, ut, O D, exempli gra- tia particularum 1000000, vel 100000 (quo in sequentibus ut plurimum facilitatis gra- tia venitur) seu plurium, aut pauciorum pro libito cipharum, exhibentur omnes Sinus, Tangentes, & Secantes (exclusis Sinibus versis, cum hi ex Sinibus, ut patebit, facile deduci possint) communiter ad singulos gradus, & minuta quadrantis, relatiue ad suppositum Radium: & hoc in gratiam di- mensionis triangulorum, quorum latera, seu anguli ope dictarum linearum artificiose mensurantur, ut manifestum erit. Sic ergo in sequenti Tabula, seu Canone assumpto Ra- dio, O D, particularum 100000 (relictis dua- bus ciphis) si proponatur ex gr. arcus, A M, vel angulus, A O M, graduum 20. 15', in eadem in- uenietur, H M, Sinum ipsius, A M, vel angu- li, A O M, esse earundem particularum 34612</p>	<p>Idē Sinus est dari arcus, vel anguli, & eius sup- plementis; ut gr. 30, & gr. 150.</p>
<p>Secans.</p>	<p>XXIII. CANON triangulorum, seu trigo- nometricus, est Tabula, in qua statuto cu- iusvis circuli Radio, ut, O D, exempli gra- tia particularum 1000000, vel 100000 (quo in sequentibus ut plurimum facilitatis gra- tia venitur) seu plurium, aut pauciorum pro libito cipharum, exhibentur omnes Sinus, Tangentes, & Secantes (exclusis Sinibus versis, cum hi ex Sinibus, ut patebit, facile deduci possint) communiter ad singulos gradus, & minuta quadrantis, relatiue ad suppositum Radium: & hoc in gratiam di- mensionis triangulorum, quorum latera, seu anguli ope dictarum linearum artificiose mensurantur, ut manifestum erit. Sic ergo in sequenti Tabula, seu Canone assumpto Ra- dio, O D, particularum 100000 (relictis dua- bus ciphis) si proponatur ex gr. arcus, A M, vel angulus, A O M, graduum 20. 15', in eadem in- uenietur, H M, Sinum ipsius, A M, vel angu- li, A O M, esse earundem particularum 34612</p>	<p>XXIV. CANON triangulorum, seu trigo- nometricus, est Tabula, in qua statuto cu- iusvis circuli Radio, ut, O D, exempli gra- tia particularum 1000000, vel 100000 (quo in sequentibus ut plurimum facilitatis gra- tia venitur) seu plurium, aut pauciorum pro libito cipharum, exhibentur omnes Sinus, Tangentes, & Secantes (exclusis Sinibus versis, cum hi ex Sinibus, ut patebit, facile deduci possint) communiter ad singulos gradus, & minuta quadrantis, relatiue ad suppositum Radium: & hoc in gratiam di- mensionis triangulorum, quorum latera, seu anguli ope dictarum linearum artificiose mensurantur, ut manifestum erit. Sic ergo in sequenti Tabula, seu Canone assumpto Ra- dio, O D, particularum 100000 (relictis dua- bus ciphis) si proponatur ex gr. arcus, A M, vel angulus, A O M, graduum 20. 15', in eadem in- uenietur, H M, Sinum ipsius, A M, vel angu- li, A O M, esse earundem particularum 34612</p>	<p>Secans.</p>

Definitiones, ac Principia.

3

Nota cum ex Tabulis extrahatur numeri mutilati.

Cur Canon triangulorum non extendatur ultra gr. 90.

Data, vel nota quantitas.

Latera triangulorum quomodo dicantur nota.

Arcus, vel angulus notus quis.

(Et nota hic pro duabus relictis notis 71 dimidium unitatis superantibus, superaddi ipsi sinui 34611 unitatem, unde est 34612; ut semper facere opus erit eum, quod relinquitur superat dimidium unitatis) Tangentem, AE, 36892, Secantem, OE, 106588, & Sinum versum, AH, 6181, per inferius tradenda precepta. Non extenditur verò Tabula ultra gr. 90, quia eiusdem Sinus seruiunt quoque pro arcubus supra gr. 90 usque ad gr. 180: arcuum vero supra gr. 90 nulla sunt Tangentes, vel Secantes, ut patuit Numero 14, & 16.

XXI. DATA, vel nota dicitur quantitas, quam mensura famosa, seu pro libito assumpta, secundum numerum metitur notum. Sic ergo dantur latera planorum triangulorum, cum scimus quot sint pedes, vlnæ, passus, aut decempedæ, &c. Eadem verò dantur tanquam Sinus, Tangentes, vel Secantes, &c. cum in partibus suppositi Radij, vt 10000, innotescent. Similiter datur propositus arcus, vel angulus, cum eorundem numerus graduum, & minutorum, &c. cognitus extat.

Considerationes, & operationes quædam præcipue circa Regulam Trium, tam per lineas, quam per Logarithmos exercendam, sunt hæc adnotanda.

Regula Trium.

XXII. REGULA Trium, seu Aurea, est, per quam, datis tribus quibuscunque numeris, quaeritur quartus propor-

tionalis ignotus; ita vt sit primus ad secundum, vt tertius ad quartum. Hic autem inuenitur inducendo secundum in tertium, ac productum per primum diuidendo, quotiens enim est quartus proportionalis quotus. Quoniam verò in sequenti Tabula sunt omnium triangulorum latera relative ad Radium, nempe tanquam Sinus, vel Tangentes, aut Secantes, &c. sicuti patebit, ideo vt eadem latera in alia quacunque assumpta mensura notificentur, necesse est ipsam Regulam Trium iuxta adhibere, iuxta tradenda precepta accommodatam.

XXIII. QVONIAM verò in eadē exercenda cogimur, vt plurimum in fractionibus incidere, quæ molestiam pariunt; calculi expediet facilitati fractionibus decimis sepeper vii. Voco autem fractiones decimas quæ habent pro denominatore unitatem cum ciphis, vt 10, vel 100, vel 1000, &c. & per punctum interpositum ab integro numero sic versus dextram separari solent. Vt patet ex gr. in hoc num. 235.7 idem significante, ac $235 \frac{7}{10}$: sicuti 25.48 idem est ac $25 \frac{48}{100}$, vel 318.529 idem ac $318 \frac{529}{1000}$, &c. Quæ cum integris adduntur, subtrahuntur, multiplicantur, & diuiduntur non secus, ac si essent puri integri, si modo integra sub integris more solito, & deinceps fractionibus in additione præsertim, & subtractione collocentur: vt patet in his exemplis.

Iuxta p. 19, & 20. Secundi Elementorum.

Necessitas hic Regula Trium.

Fractiones decima. Operationes in eisdem cum integris, sunt velut in puris integris. Vnde fac perinde, ac si de decies addere 23510 cum 10748: & 28708 cum 5370 (ponendo ciphra pro notis vacantibus) vel subtrahere 509 ex 2034, & 8481 ex 57800; multiplico 8325 per 72, et 273 per 582: ac diuid. 24853 per 56, & 384760 per 224.

Additio.

Subtractio.

23.51	287.08
10.748	53.7
34.258	340.78
Multiplicatio.	
83.25	27.3
7.2	5.82
16650	546
58275	2184
599.400	1365
	158.886

20.34	57.8
5.09	8.481
15.25	49.319
Diuisio.	
5.6 248.53	2.24 3847.60
	44.3
	1717
	245
	1607
	213
	396
	45
	1720
	152

Regula inter fractionis in multiplicationibus, & diuisionibus.

Nota autem in multiplicationibus, quot sunt notæ puncto ad dexteram separatæ in ambobus numeris sese multiplicantibus, tot in producto esse puncto separatandas. Vnde in harum multiplicationum productis tres notæ separatæ fuerunt, quia tres erant in numeris multiplicatis. In diuisionibus verò è contra quot sunt notæ separatæ in diuidendo tot debent esse notæ separatæ in diuisore, ac quotiente simul sumptæ: & si diuidendus tot habeat notas, vel pauciores, quam diuisor, eidem diuiso addenda sunt ciphre, & continuanda est diuisio, quousque libuerit, sed ita vt possint haberi notæ separatæ in quotiente, vel saltem ipse quotiens completus. Sic ergo in primo exemplo

diuisionis cum diuidendus 248.53 habeat duas notas separatatas, nempe 53, & diuisor 5.6 habeat unam, quæ est 6, debuit in quotiente 44.3 una nota separari, nempe 3, vt nota separatæ in diuisore, & quotiente essent duæ, velut sunt duæ in diuidendo. In posteriori vero exemplo diuidendus erat 3847.6, diuisor 2.24, unde cum nota separatæ in diuisore superent eas, quæ sunt in diuidendo, eidem addita est ciphra, & continuata est diuisio, vt haberetur quotiens completus 1717, a quo non sunt notæ separatandas, nam duas habet diuisor, & duas quoque diuisum, unde adquantur notæ separatæ in diuisore, & quotiente, notis separatatis in diuiso, & idè, &c.

XXIV. QVÆLIBET fractio in fractio-

A 2

nes

Quia propor-
tio 1 ad 10
est aequalis
proportioni 10
ad 100, nec-
non 100 ad
1000, ut &
1000 ad
10000, &c.

numerumque ad earundem
 numerumque proportionem interueniant 10000000
 sic finitur in 1, & 10 concipitur interponi
 9999999 remansit earundem p. oportuit enim
 numerum) & continuati usque minimis pro
 portionibus d. 10 usq; ad 100, habebuntur alie
 1000000 proportionum multae, ita vt ab 1
 usq; ad 100 sit 2000000 ex. usq; idem, unde
 ab 1 usque ad 1000 erunt 3000000 propor
 tionales, ab 1 usq; ad 10000 erunt 4000000
 ex. usq; idem, & sic deinceps in infinitum. Hinc
 fit vt propter tam minutam proportionis diui
 sionem, numeri adhiberi ab 1 usq; ad 10000,
 & deinceps coincident seriem cum artibus, seu
 numeris distarum proportionumclarum 3 vt &
 numeri Sinuum, Tangentium, & Secantium.
 Si ergo, concepta hac quodamod. infinita seri

Si quis verò scire cupiat quanam sit maxima
proportio, quæ assumitur pro reliquarum unari-
tatum omnium mensura posito Logarithmo uni-
tatis Ciperæ, & Logarithm. Denarij 10000000,
notet eam proximè esse, quæ est inter 1, qui di-
catur, A, & X $\frac{23025853}{10000000000000000}$, qui
dicatur, B. Ar si Denarij Logarithm. ponatur
100000, illa proximè est inter, A, 1, & B, $\frac{23025853}{10000000000000000}$, horum enim Logarith-
mus est 1 indicans unam proportionem. Si
idem B, ducatur in se ipsum præque, C, deinde
identus B, ducatur in se ipsum, C, & successivè in
factis subsequentes quæ sint, D, E, F, G, H, I, &c.
et C, hærent numeri dicti infinita serie, &
geometricè proportionales ab Unitate 7 & eorum
Logarithmum 1, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, &c.
Quod si continuari intelligatur multiplicatio-
nes ipsarum B, in factis successivè, & eorum
Logarithmum donec perveniatur ad factum 2 nu-
merum absolutum, vel ad 3, 4, 5, 6, 7, 8, 9, 10, &c.
aut alteram factis, quæ sint eadem propor-

omnes num.
absoluti sunt
conspiciendi in
quadam infi-
nita serie geo-
metricæ pro-
portionali, si-
milis seriei, A,
& in eadem
quoq; omnes
Sinus, Tan-
gētes, & Se-
cantes. Eo-
rum autem
Logarithm. in
alia serie ar-
ithmeticæ pro-
portionali se-
rii, B, aut, L,
simili.

Alia Logarithmorum Specie prius enu-
gavit Nepe-
rius, in quibus
pro Logari-
thmo Radix
posuit ciphra-
de quibus ve-
de meum Di-
rect-p.p. cap-
it. At hos pra-
stantiores, &
ipse tandem
introducavit
in quibus uni-
tatis Log. est
ciphra, & de-
cary Log. uni-
tatis cum ci-
phris, ut
CCCCCO.

quis-

quissimi, etiam eorum Logarithmi exhibebunt propinquissimi. Logarithm. numerorum absolutorum 2, 3, 4, 5, &c. Intelligi ergo in serie, A, supraposita, Vnitati succedere immediate pro ipso 2

numerum $1 \frac{23025853}{10000000000000}$, vel

$1 \frac{23025853}{10000000000000}$, & capies, quod sit

initium dictæ infinitæ seriei.

Hinc sequitur in eadem infinita serie, & subinde in numeris absolutis quousque extenduntur Logarithmi, seu in Sinibus, Tangentibus, & Secantibus, &c. qui omnes cadunt propinquissime in dicta serie infinita si quatuor quilibet numeri, vt, C, D, E, F, sint proportionales, eorum Logarithmos esse æquidifferentes. Cum enim proportio, C, ad, D, ponatur æqualis proportioni, E, ad, F, ex tot proportionculis componetur proportio, C, ad, D, ex quot componetur proportio, E, ad, F: dictæ verò proportionculæ indicantur, seu numerantur per vnitates, quæ sunt in eorum Logarithmis (etenim eorum quælibet vnitates indicat vnâ proportionculam) ergo tot vnitatibus Logarithmus ipsius, C, differet à Logarithmo, D, quot vnitatibus Logarithmus ipsius, E, differet à Logarithmo, F. hoc est erunt eorum Logarithmi æquidifferentes.

Ex quo tandem deducitur, quod summa Logarithmorum extremorum, C, F, erit æqualis summa Logarithmorum mediorum, D, E, hoc enim conuenit æquidifferentibus numeris: vt si ex gr. 7 excedit 4, quantum 12 excedit 9, nempe 3: summa extremorum 7, & 9, æquatur summa mediorum 4, & 12, quæ est 16. Et hoc idem patet in Logarithmis seriei, B, nempe in ipsis, G, H, I, K, proportionalibus seriei, A, nempe, C, D, E, F, ascriptis; summa enim, G, K, æquatur summa, H, I, quæ est 12. Si ergo in numeris harum Tabularum, quibus ascripti sūt Logarithmi, quatuor fuerint proportionales, summa Logarithmorum extremorum erit equalis summa Logarithmorum mediorum: sicuti & trium proportionalium summa Logarithmorum extremorum erit quoque æqualis duplo Logarithmi medij: & contra.

Modus autem, & compendia inueniendi nedum Sinus, Tangentes, Secantes, & Sinus versus, ad datum Radium: sed etiam Logarithmos numerorum absolutorum, necnon distorum Sinuum, Tangentium, &c. non descripta integræ iam dicta infinita serie (hoc enim neq; est necessarium, nec possibile) sed tantum aliquibus eiusdem inuentis numeris, eorumque Logarithmis, tanquam reliquorum radicibus, seu certis limitibus, intra quos cadentium numerorum Logarithmi facile postea per partem proportionalis inuentum habebantur apud alios Auctores, ac præsertim Briggsii, & Vlacq in eiusdem Briggsii Arithmetica Logarithmica videri possunt. Hac enim cum non paucis sient explicanda, nec sequentium calculorum praxi sint necessaria, præterea

brevitatis causa hic præmittuntur.

XXVI. ETSI verò Logarithmi, qui non tam numeris absolutis, quam Sinibus, Tangentibus, & Secantibus in Tabulis hic adiectis ascribuntur, sint eiusdem rationis, cum habcant omnes dictam proprietatem: attamen distinctionis gratia pro his specialia nomina formata sunt. Vbi ergo dici poterat Logarithmus Sinus, Tangentis, Secantis, &c. pro Sinibus nomen genericum Logarithmi (quod vt sic conuenit numeris absolutis) tanquam speciale retentum est. Logarithmi verò Tangentium dicti sunt, Mesologarithmi: & Logarithmi Secantium, Tomologarithmi: ac Sinuum versorum, Versilogarithmi, quibus in neo Directorio vsus sum, licet hic parum in vsu venient.

Nota autem quod dicere Logarithmum, vel Mesolog., &c. dati arcus, vel anguli, vt graduum 20, erit dicere Logarithmum Sinus, vel Tangentis, &c. graduum 20. At Logarithmus ex gr. numeri 318, eiusdem tanquam numeri absoluti subintelligendus erit. Hinc Logarithmus secundus, Mesolog. secundus, Tomolog. secundus, seu complementis arcus, vel anguli, sicut & de Sinibus, Tangentibus, ac Secantibus secundis Num. 18 præludiali dictum est, accipiendus erit. Et tandem non ignorandum me Trigonometriam Logarithmicam appellare, quatenus procedit per hos Logarithmos.

XXVII. VT ergo calculator vtraque Trigonometria, hoc est vel lineari, vel logarithmica pro libito vti possit, Canon duplex trigonometricus, scilicet Sinus, Tangentes, &c. & Logarithmos, ac Mesolog., &c. in simul comprehendens hic additus est, cuius dispositio sic se habet. In vnaquaque pagina sunt 7 ordines numerorum: primus ordo continet gradus, & minuta quadrantis circuli, gradus quidem in capite paginæ sinistra, & in prima columna vsq; ad 45, & in calce paginæ dextra vsq; ad 90 procedentes, charactere crassiusculo prænotatos: minuta vero 60 descendunt in pagina sinistra, & ascendunt in dextra. Excipe tamen primum, & vltimum quadrantis gradum, priorem primi gradus, & vltimi posterior medietas procedit per singula 10, & reliquæ duæ eorundem medietates per singula 30, vt ibi non nihil exactior calculus, quam per sola minuta, haberi possit. Sic verò tota Tabula iuxta consuetum disposita est, vt pagina altera semper alterius complementum e regione visendum præbeat. Sequuntur deinde tres priores numerorum ordines, nempe Sinuum, Tangentium, & Secantium: ac tres posteriores, scilicet Logarithmorum pro Sinibus, Mesologarithmorum pro Tangentibus, ac Tomologarithmorum pro Secantibus eiusdem paginæ, vt & tituli indicant, existente Logarithmo Radij 10,000,000, ad similitudinem minorum in sinistra pagina deorsum, & in dextra sursum crescentium. Hi verò Logarithmi respiciunt Radium particularum 100000,00000, unde & Sinus, Tangentes, ac Secantes tribus notis longiores esse debuissent: &c. deberent

Logarithmi, Mesologarithmi, Tomologarithmi, & Versilogarithmi: Sinus, Tang., Secant., ac Sinus versis sūt substituti.

Trigonometria logarithmica. Canonis duplicis trigonometrici dispositio.

Numeri Sinuum, Tangentium, &c. deberent

ici infiniti sunt hmetice orthona-

in post-Tabula.

es num- busi sunt spidi in lam infi- serie geo- ricæ propor- tionalis, si- seriei, A, n eadem; omnes is, Tan- g., & Se- c., &c. Eo- autem scribunt in serie ar- tificæ propor- tionalis se- B, aut, L,

Logari- rum spe- ius enul- Nepe- n quibus Logari- Radij ciphrar- ibus va- rum Dñ. p. cap. hos præ- oies, & tandem- uauit- nus vni- Log. est a, & de- Log. uni- um ci- ut 0000.

6 Trigonometria Definitiones, &c.

*esse in a. d. un.
fo Canone
tribus notis
longiores re-
lativè ad eius
Logarithmos.
Chilias nu-
merorum ab-
solutorum ab
1 usq; ad
1000, cu eo-
rum Logarith-
morum differentijs.*

verum quia hoc nihil præiudicij calculis affer-
re potest, cum illi vel per solas lineas, vel per
solos Logarithmos sine respectu ad lineas, sed
tantum relativè ad arcus fieri soleant, propterea
cum ad Radium 10000000 sufficere possent,
sic eosdem retinendos esse duxi. Tandem
Canoni adiuncta est Chilias numerorum
absolutorum ab 1 usq; ad 1000, cum eorum
Logarithmis, ac differentijs iisdem interpo-
sitis, in gratiam præcipuè Trigonometriæ
planæ logarithmicæ. Ab ipsis verò Tabu-
larum numeris dux ad dexteram nota pun-
cto separata sunt, non quidem ut fractiones

decimæ, sed ut modo longioribus, modo
breuioribus numeris pro libito calculator
uti possit; qui Tabularum numeri cum ac-
cipiuntur completi, expediet eosdem de-
scribere sine puncto, ne illud faciat confu-
sionem, dum in calculis occurrunt fractio-
nes decimæ adhibendæ, cum & ipsæ pun-
ctis separari soleant.

XXVIII. DENIQ; congruum erit has
Notas præintelligere, eisdemq; brevitatis
gratia in sequentibus uti. Semper enim si-
gnificabitur per

*Canoni adie-
cta.*

*Nota in se-
quentibus
usurpanda.*

Comp. Complementum.
Suppl. Supplementum.
Gr. 25. 17. 48. &c. Gradus 25, minuta 17,
secunda 48, &c. & sic in cæteris.
Si. Sinus.
Si. 2. Sinus secundus, seu complementi.
Ta. Tangens.
Ta. 2. Tangens secunda.
Se. Secans.
Se. 2. Secans secunda.
Si. ver. Sinus versus.
Si. ver. 2. Sinus versus secundus.
Log. vel l. Logarithmus.
Log. 2, vel l. 2. Logarithmus secundus.

Ref. log. aut R l. Retiduum logarithmi ad
duplum log. Radij, nempe ad 20000000.
Mes. vel M. Mesologarithmus.
Mes. 2, vel M. 2. Mesologarithmus secun-
dus.
Tom vel T. Tomologarithmus.
Tom 2, vel T. 2. Tomologarithmus secun-
dus.
Vers. Versilogarithmus.
Vers. 2. Versilogarithmus secundus.
Carac. Characteristica logarithmi.
Canonem. Canon duplex trigonometricus
Chiliadem. Chilias numerorum absolu-
torum ab 1 usq; ad 1000, &c.



TRI-

TRIGONOMETRIÆ

P L A N Æ

Linearis, & Logarithmicæ

P R O B L E M A P R I M U M.

*Dati Arcus, vel anguli, Sinum, Ta. Sc. & c. vel Log. Mes. & c.
è Canone extrahere.*

Extrahitio linearum, vel Logarithmorum. Causa. Pro gradibus infra 45 quomodo sit faciendâ.

Si datus arcus, vel angulus non excedat gr. 45, ut si sit ex gr. gradus 37.43 querendi erunt in sinistris Canonis faciebibus, & in fronte primæ columnæ ipsi gr. 37, ac in eadē descendendo 43, quibus in directum aderūt in suis columnis Si. 61176 (si velimus relinquere notas post punctum) Ta. 77335, Sc. 126415, Log. 978658, Mes. 988838, & Tom. 1010180. In dimidio primo autem quadrantis gradu eadē quoq; habes tabulatos ad singula 10, & in reliqua medietate ad 30. Quod si sit supra gr. 45, & non ultra gr. 90, ut gr. 58.32, querendi erunt in dextris faciebibus, & in calce columnæ graduum ipsi gr. 58, & in eadem ascendendo 32, quibus erunt in directum in suis columnis Si. 85294, Ta. 163398, Sc. 191570, Log. 993092, Mes. 1021325, Tom. 1028233. Porro in ultimi gradus posteriori medietate eodē quoq; habebis ad singula 10, & in priori ad singula 30. Verum si datus arcus, vel angulus excederet quidem gr. 90, sed non gr. 180 (ut semper erunt nobis tractandi, quia omnis angulus minor est quam gr. 180, seu omnis arcus, qui sit latus trianguli sphericæ) ut si esset gr. 120.40, querendus esset Si. vel Ta. aut Log. & c. eorundem supplementi, hoc est graduum 59.20, vel Si. 2, Ta. 2, aut Log. 2 excessus supra quadrantem, hoc est graduum 30.40.

Pro Si. ver. graduum infra 90.

Pro Si. ver. graduum supra 90 usq; ad 180.

Pro Versilogarithm.

Pro habendo vero Si. ver. graduum infra 90, ut gr. 37.43, nota comp. gr. 52.17, cuius cape Sinum 79105, quem deme ex Radio 100000, & restabit 20895 Si. ver. graduum 37.43. At pro gradibus supra 90, ut pro gr. 120.40 nota comp. gr. 30.40, nempe excessum supra 90, & eius cape Sinum 51004, quem adde ipsi Radio 100000, & fiet 151004 Si. ver. graduum 120.40. Si quis vellet dari arcus, ut gr. 10.12 Versilogarithm. illi capiendus esset Log. dimidij arcus, nempe Log. gr. 10.6, qui est 924395, & eius duplo 1848790, addito semper Log. numeri 2, seu Binarij, qui est 030103, fieret summa 1878893, à qua subtracto Radij Log. 1000000 (seu viti ad sinistram loci deleta vnitate)

remaneret 878893 Versilog. graduum 20.12, quæ situs. Idem fiet pro gr. supra 90.

Si quis verò cuperet ultra gr. & minuta, eodē extrahere etiam ad secunda (quæ non sint Tabulata) eodē pars proportionalis sic venanda esset. Ut si queratur Sinus graduum 37.14.20, cum gr. 37.14 capto Sinu 60506, eoque dempto ex Sinu proximè maiore tabulato 60520, ut restet differentia 23, hæc multiplicabitur per secunda 20, & productum 460 per 60 (seu compendiosius 46 per 6) diuisum dabit quotiē: em 8, nempe partem proportionalem differentia 23 congruentem ipsis 20, quæ addita inuento Sinui 60506 constituet Sinum 60514 dictorum graduum 37.14.20. Eadem ratione Ta. Sc. & c. Log. Mes. & c. etiam ad secunda haberi poterunt: aduertendo tamen quod ad initium, & finem quadrantis, ubi arcus procedunt per 10, productio diuisio non per 60, sed per 10, & ubi per 30, & per 30 fieri debet.

Denique cum est extrahendus Si. Ta. & c. secundus graduum infra 90, cum minutis, vel etiam secundis scis extrahendum esset Si. Ta. & c. comp. hoc est defectus à quadrante; & pro gr. min. & sec. supra 90, scis comp. esse excessum supra 90. Vnde expeditius erit, præsertim cū ad sunt secunda, notare seorsim talem defectum, vel excessum ad gr. 90, & deinde Si. Ta. & c. huius comp. ut supra inuenire.

Si ergo postuletur Si. 2 graduum 25.38.43, notato comp. 64.21.17 huius quæram Sinum, qui e rit Si. 2 graduum prædictorum. At si queratur Si. 2 graduum 118.4.3, notato comp. hoc est excessum supra gr. 90, nempe gr. 28.4.3, horum Sinus erit Sinus graduum 118.4.3. Caut ergo ne confundaris in querendo Sinu graduum supra 90, & eorundem Sinu 2, et enim ex gr. pro Sinu graduum 120 debes accipere Sinum suppl. hoc est gr. 60: at si vis Si. 2 graduum 120, debes capere Sinum excessus supra gr. 90, hoc est Si. graduum 30. Et eadem ratio currit pro cæteris lineis, ac Log. verum tamen non hallucinaberis, si nomina comp. & suppl. rectè apprehenderis. Nota tamen cum ex Tabulis extrahetur numeri longiores, quod semper exactiores ipsæ operationes euadent.

Pro gr. minutis, & secundis eorundem extrahitio.

Fit nempe ut 60 ad 23, ita 20 ad 8.

Nota pro initio, & fine quadrantis in Canone.

Pro extrahendis Si. 2, Ta. 2, & c. graduum tam infra, quam supra gr. 90.

Nota.

Nota.

PRO-

PROBLEMA SECVNDVM.

Dati Sinus, vel Ta. &c. seu Log. Mes. &c. arcum, aut angulum in eodem Canone inuenire.

Extradio arcum ex Canone cum datis lineis, vel Log. quomodo sit faciendum.

DATVS Sinus querendus est in columnis Sinuum, data Tangens inter Tangentes, &c. datus Log. Mesolog. &c. inter Log. Mes. &c. tam in dextris, quam in sinistris Canonis facibus, & si reperiatur in Tabula, accipietur gradus, & minuta illi in directum in columna gr. & min. in eadem facie respondentia. At si eadem intermedium tabulatis, poterit (si exactiorem calculum non cures) accipi arcus propinquiori tabulato respondens. Sic ergo dato Sinui 45399 inuenies respondere gr. 27. 0', Tangenti 120593 gr. 50. 20', &c. Log. 960070 gr. 23. 30'. & sic in reliquis. At pro Sinu 53489, quem non reperies in Tabula, capies propinquorem Sinum tabulatum 53484, cui respondent gr. 32. 20', &c.

Exactior extractio, quae per partem proportionalem habetur.

Vt 25 ad 5, ita sit 60 ad 12.

Nota pro initio, & fine quadrantis in Canone.

Pro Sinibus versis.

Verum cupiens exactiorem arcum (sumptis semper gradibus, & minutis, &c. proximè minori tabulato respondentibus) subtrahe eundem proximè minorem ex proximè maiori, & ex dato, ut restet differentia maior, & minor. Deinde per Regulam trium, ut illa ad hanc, ita fac 60 ad secunda quæsitæ arcus. Vt cum propositio Sinu 53489 proximè minor sit in Tabula 53484, dant gr. 32. 20' deme ipsi ex proximè maiori 53509, & ex dato 53489, & proueniet differentia maior 25, & minor 5. Ducas ergo 5 per 60, & productum 300 diuide per 25, & sient pro quotiente 12, unde arcus quæsitus erit gr. 32. 20. 12". Ad initium autem, & finem quadrantis, ubi arcus per 10", vel 30" procedunt, minor differentia ducenda erit per 10, seu per 30, & productum per maiorem diuisum dabit secundam iungenda tabularis, ut exaltè quæsitus arcus colligatur.

Sinus versus, si sit Radio minor, demitur ex Radio, vel si Radio maior, tollitur è con-

tra Radius ex eo, & residui tanquam Sinus quæsitus arcus, demptus à quadrante in priori casu, & additus eidem in posteriori, relinquit, vel componit arcum dati Sinus versi. Vt Si. ver. 153, Radio 100000 minor, ex eo demptus relinquit Sinum 99847 graduum 86. 50', qui demptus ex gr. 90, dat gr. 3. 10, cuius 153 est Si. versus. At Si. versus existente 199847 Radio maiori, sublato 100000, restat Sinus 99847 graduum 86. 50', addendorum gradibus 90, ut fiat arcus gr. 176. 50', cuius 199847 est Si. versus.

Si quis velit alicuius Versilogarithm. arcum, addat illi Log. graduum 30, qui est 969897, & summæ dimidium, ut Log. dabit arcum, cuius duplum erit arcus quæsitus. Vt si sit Versi. 962984, adde illi 969897 sit 1932881, cuius dimidium 966440, ut Log. dat arcum gr. 27. 30', cuius duplum gr. 55. 0' est arcus quæsitus.

Denique si quærat arcus alicuius Sinus 2, vel Ta. 2, &c. aut Log. 2, Mes. 2, &c. expectatus erit quærare arcum proprium illius Si. vel Ta. &c. aut Log. Mes. &c. cuius deinde comp. erit arcus quæsitus. Vt si datur Si. 2 ex gr. 48463, huius tanquam Sinus quære proprium arcum (ut supra didicisti) gr. 28. 59. 17', cuius comp. gr. 61. 0. 43' est arcus quæsitus. At si dati Si. 2, ut eiusdem 48463 sit capiendus arcus quadrante maior, inuenio ut supra illius proprio arcu gr. 28. 59. 17', eiusq; comp. gr. 61. 0. 43', hic non erit quæsitus arcus, sed huius comp. supplementum, nempe arcus gr. 118. 59. 17'. Hic idem verò etiam resultat si proprius arcus gr. 28. 59. 17' quadrante augeatur, sient enim pariter gr. 118. 59. 17', & est facilius. Res eodem modo in Log. ac reliquis procedit.

Pro Versilogarithmis.

Pro arcu Sinus 2, Ta. 2, Log. 2, &c. inueniendo.

Pro Si. 2, vel Log. 2 arcus quadrante maioris.

PROBLEMA TERTIVM.

Dati Numeri absoluti Logarithmum à Chiliade excerptum.

Pro numeris infra 1000.

Pro numeris supra 1000.

SI datus Numerus non excedat 1000, ut si sit 427, cum quæres in columnis Numerorum Chiliadis, & de regione ipsius inuenietur in adiacente ad dexteram Logarithmorum columna Log. illi congruens 26304279, seu pauciorum si vis notarum, ut 263043.

At si excedat 1000, si non sit integer, sed ex integro, & fractionibus decimis constas, dele punctum separans fractionem decimas, ut sit tibi tanquam integer, ut si sit 2547.

82, cuius sit querendus Log. dele punctum, ut sit tibi velut numerus integer 254782. Deinde puncto iterum ipsum frangendo ad dexteram tot notas separabis sic 254. 782, ut reliquis 254 non excedat 1000, sicut & in ijs, qui integri proponuntur pariter facies. Capto ergo ex Chiliade Log. ipsius 254, qui erit 240483, accipe quoq; sequentem Tabulæ differentiam 171 (vnitate in hoc casu auctam propter 65 relictas notas dimidium vnitatis superantibus) quam sic

ad

Problema tertium.

9

ad Regulam Trium aduaptabis. Cum enim

in tuo numero supersint $\frac{782}{1000}$ tot millesimi

mas ipsius differentie 171 sumere debes. Dic ergo si 1000 dant differentiam 171, quotam eius partem dabunt 782? Ductis igitur 782 per 171, & producto 133722 diuiso per 1000 (quod fit abscindendo ad decimam puncto tres notas) inuenies quotientem 133.722, hoc est (pro fractione 722 vnitate integro 133 addita) quotientem 134, qui additus inuenit prius Log. 240483 dabit Log. 240617 numeri 254.782 ex integro 254. & fractione 782 constantis. Verum quia tibi propositus numerus vere est 2547.82, propterea aliqua est adhibenda correctio in dicto Logarithmo, eius tamen prima tantum nota ad sinistram est corrigenda, cuius

ralis erit Regula. Considera quot notas habeat tuus integer numerus, & tot vnitates, vna minus, debet habere prima ad sinistram nota Logarithmi eidem respondentis, quæ dici solet Logarithmi Characteristica, reliquæ verò notæ non mutantur. Vt cum in dicto

numero proposito 2547.82 integer 2547 conficit ex 4 notis, numerus 3 erit prima nota Logarithmi eidem respondentis, quare mutata nota 2 in 3, inueniemus tandem ipsius 2547.82 Log. esse 340617, cuius quinq; posteriores notæ post 3 sunt eadem, ac ipsius. Hac ergo ratione cuiuscunq; numeri siue integri, siue ex integro, & fractionibus decimis constantis cõgruum Logarithmum adinuenies. Vt pro numero 7.3, quæres Log. ejus decupli, nempe numeri integri 73, qui est 186332. In quo tamen Caract. 1 mutanda est in 0, quia numerus integer est tantum vnus notæ, nempe 7, & fiet 086332 Log. numeri 7.3. Pari ratione pro 57.3 quæres Log. numeri 573, qui est 275815, at pro 57.3 (mutata Caract. 2 in 1) erit 175815. Et sic in reliquis semper efficies.

Ad horum rationem intelligendam scias inueniri prius Log. ipsius 254, & pro reliquis fractionibus decimis 782 sumi partem proportionalem, hoc est tot millesimas differentia subsequens, quia & Logarithmi, & numeri ibi ferè proportionaliter augentur, vt in progressu differentiarum Chiliadis cernere potes, quæ ferè sunt æquales, præterquam ad initium eiusdem Chiliadis: & propterea pro 7.3 in margine dixi quarendum esse 73, quia 7.3 esset quarendus in principio Chiliadis, ubi propter differentiarum magnam inæqualitatem pars proportionalis aliquantulum deficit à vero. Vt

verò rationem Regula mutanda Characteristica Logarithmorum pariter intelligas, scias totum negotium pendere ex Logarithmo numeri 10, qui est 100000 reliquis duabus ciphitis, ostendens tot proportionculas interponi in serie infinitas, dicta Num. 25, præclud. inter vnitatem, & 10; & consequenter proportionem quancunq; decuplam (quia erit æqualis proportioni ipsius 10 ad 1) importare 100000 proportionculas. Ergo si habeamus ex gr. Logarithmum numeri 7, qui est 084510, & velimus Log. decupli, nempe 70, addemus illi Log. Denarii 1 nempe 100000, seu Carac. 0 in 1 commutabimus, & fiet numeri 70 Log. 184510, indicans inter 1, & 70 intergei, ultra 84510 proportionculas, quæ cadit inter 1, & 7, alias 100000, nempe inter 1, & 70, proportionculas cadere, 184510. Eadem ratione si huic iterum addamus Log. Denarii 100000, seu aliam vnitatem in Carac. fiet 284510 Log. numeri 700 prioris 70 decupli, seu ipsius 7 centupli. Sic addita alia vnitate, fiet Log. ipsius 7000, & sic deinceps &c. Ex quo patet cum numerus datus est vnus notæ, vt 7, Carac. esse, 0, cum est duorum notarum, vt 70, Carac. esse 1, cum trium, vt 700 esse 2, cum quatuor, vt 7000, esse 3, & sic deinceps semper erit Carac. tot vnitates, vna minus, quot erunt notæ in proposito numero, reliquæ verò Logarithmi notæ immutata remanebunt. E contra si à dati numeri Log. ut ab ipso 384510, qui est Log. numeri 7000, auferatur 100000, seu vnitas à Carac. 3, remanebit 284510, cum ipse reliquis notis, Logarithmus numeri subdecupli eiusdè 7000, nempe ipsius 700, & sic deinceps descendendo versus vnitatem &c. habebitur Log. subcentupli, 70, & submillicupli 7 eiusdè 7000, ablati à Carac. continuo vnitatibus. Res eodem modo procedit in integris, & fractis, vt in proposito numero 2547.82, cuius est centuplus 254782 (si punctum remouetur, quod ex hoc cognosces, quia si 2547.82 multiplicetur per 100 iuxta Num. 23 præclud. fiet numerus 254782) unde si posset haberi in Chiliade ipsius 254782 Logarithmus, in eius Carac. duæ vnitates essent postea minuenda: sed quia in Chiliade non sunt tam magni numeri, idè puncto separatis tribus notis, vt fit 254.782, nempe eo diuiso per 1000, inuenitur vt supra eius Log. 240617, cum verò 2547.82 sit tantum diuisus per 100, erit 254.782 subdecuplus ipsius 2547.82, & idè aucta vnitate in Carac. Log. 240617, fiet Log. 340617 congruens ipsi 2547.82, scilicet, Carac. erit 3, cum nempe in eo sint 4 notæ 2547 integrum numerum constituentes; cum enim fractiones decimæ non promoucant numerum in altiore proportionem decuplam, idè Carac. non augetur, vel immittitur nisi panes notæ integri numeri. Sic pro 7.3 quæritur Log. 73, eius decupli, qui est 186332, sed mutata Carac. 1 in 0, fit Log. 086332 subdecupli ipsius 73, nempe ipsius 7.3. Eadè ratione Log. numeri 573, qui est 275815, est etiam Log. subdecupli, nempe ipsius 57.3, mutata Carac. 2 in 1, hoc est ipse 175815. Et sic in cæteris quibuscunq; res se habebit. Hinc insuper innotescit cum numerus est plurius,

Quot sunt vnitates in Carac. Logarithmi cuiuscunq; tot decuple proportionales intergei cadunt inter numerum absolutum, dicti Logarithmi, & vnitatem, & tot quoq; notæ post primam habet consequenter idem numerus, ex quo Regula tradita circa Carac. Log. est manifesta.

Carac. Logarithmorum non respicit fractiones decimas.

B

quam

Ex Arithmetica vulgaris.

Regula Characteristica Logarithmorum summi notanda.

Pro Versilogarithmis.

Pro arcu Sinus 2, Ta. 2, Log. 2, &c. in uendendo.

Pro Sin. 2, vel Log. 2 arcus quadrantis notis.

Expedi ex gr. pro 7.3 quæritur Chiliade 73, quia in principio Chiliadis pars proportionalis, quæ esset sumenda pro aliquantulum deficit à vero.

quam decem notarum, quod tunc eius Log. Carac. duplici nota scribitur est enim vel 10, vel plusquam 10. Talem verò Carac. habent Logarithmi Tangentium supra gr. 45, & omnium Secantium, quæ perueniunt usque ad 14 unitates, ut in Canone ad gr. 80. 59. 50 in eius arcus Tang. & Sec. videri potest. Talem habet & Radij Logar. 10, 000000, cuius Carac.

Logarithmi
ipsius Radij.

est 10, & ideo Radius deberet esse 1, 00000, 00000, ut est in Canone Rhetico, & consequenter Si. Ta. & Se. tribus notis longiores esse deberent, relativi ad eorundem Logarithmorum Carac. ut Num. 27. Præclud. dicebatur: verum quia nullum incommodum calculi hinc oritur, propterea sic in Canone positi fuerunt.

Carac. est 10,
quem idcirco
virgula sepa-
raui.

PROBLEMA QUARTVM.

Dati Logarithmi numerum absolutum in eadem Chiliade inuenire.

Pro Logarith-
mici tabu-
latis.

Pro non ta-
bulatis.

Pars propor-
tionalis in-
quiritur scilicet,
ut in Prob. 2
circum arcus.

DATVS Log. in Chiliade quæ situs, ibiq; repetitus dabit in columna numerorum ad sinistram illi adiacente, numerum eidem Log. respondentem. Vt si sit 209691, numerus respondens erit 125: si 149136 erit 31. At si non reperiatur in eadem, mutata semper tui Log. Carac. in 2, illum quæres, & si non inuenieris, capies pro eo propinquiorum, eiusque numerum. Vel exactius operando, proximè minorem Tabulæ demes ex tuo Log. & cum reliqua differentia, ac differentia Tabulæ subsequente partem proportionalem venaberis, iungendam numero respondenti proximè minori, ut numerum obtineas quæ situm, sicut in hoc Exemplo. Dati Log. 575489 numerum agnosco ex Carac. 5 debere esse 6 notarum, mutata ergo Carac. 5 in 2, pro eo quæro 275489, quo proximè minorem inuenio 275435, qui dat numerum 568, deficientibus adhuc à quæ sito numero tribus notis, quas sic inquiri. Ex Chiliade capio sequentem differentiam 76 fac dempto 275435 ex 275489, remanet minor

differentia 54. Deinde dico vt 76 ad 54, ita 1000 (propter tres notas, quæ deficiunt, nempe generaliter ita 1 cum tot ciphis, quot sunt deficientes notæ) ad 711 notas ipsi 568 subiungendas, unde numerus Logarithmo 275489 correspondens est 568.711. Sed qui respondet Logarithmo 575489 est illius millescuplus, id est ter decuplatus, propter tres unitates, quibus Carac. 5 superat Carac. 2: ergo cum 568.711 sit millescuplus ipsius 568.711, sufficit in hoc auferte punctum, & remanebit 568.711 numerus sex notarum Logar. 575489 correspondens. Si vero Logar. 275489 inuenitus fuisset præcisè in Tabula pro tribus deficientibus notis, tres ciphæ fuissent subiungendæ. Eadem ratione pro Log. 027472, quæ sita 227472, habebis numerum (si pro eo sumas proximè minorem 227416) 188, sed quia Carac. 02 deficit à 2 duabus unitatibus, propterea eius subcentuplus 188 est numerus Logarithmi 027472. Et hæc omnia sic fieri debent, vt semper inter Carac. unitates, & notas quæ sita numeri dicta concordia conseruetur.

Ex Arith.
vulgari.

Iuxta Regu-
lam Carac.

PROBLEMA QVINTVM.

Regulam trium absoluere.

Primus mo-
dus per mul-
tiplic. & di-
uisionem.

Ratio huius
modi elicitur
ex prop. 19. &
20 Septem
Elem.

Secundus mo-
dus per addi-

SINT trium arcuum, vel angulorum, vt, A, B, C, Sinus, E, F, G, e Canone extracti iuxta Prob. primum, quibus sit inueniendus quartus Sinus proportionalis, H, eiusque arcus, vel angulus, D. Ducemus ergo, F, in, G, & productum, P, diuidemus per, E, & fiet, Q, quotiens, seu (reliqua fractione, & pro ea addita ipsi quotienti unitate) fiet, H, qui in Canone quæ situs inter Sinus iuxta Prob. 2, dabit arcum, seu angulum, D, quæ situm.

At per Log. vice Sinuum accipiemus in eodem Canone iuxta Prob. 1. ipsorum, A, B, C, Log. I, K, L. Et quia ex dictis Num. 25 præclud. si 4 numeri sunt proportionales,

summa Logarithmorum extremorum, est æqualis summa Logarithmorum mediorum, ideo facta summa, M, Logarithmorum, K, L, ab ea subtrahemus Log. I, & remanebit Log. N, qui iuxta Prob. 2, quæ situs in Canone inter Log. ostendit in columna Sinuum eidem congruum Sinum, H, seu (si negligatur Sinus) in columna laterali arcum, aut angulum, D. Manifestum est ergo, H, esse trium, E, F, G, quartum proportionalem, quia summa eorundem Log. I, N, æquatur summa, K, L: unde, H, erit Sinus, & D, arcus, seu angulus quæ situs: & hoc ex dictis Num. 25 præclud. innotescit.

tionem, &
subtractionem
Logarithmo-
rum, in eorundem
usu ge-
neratis, ac
confectus;
quæ, relicta
tertio susse-
quenti, quæ
provisio etiã
viti poteris.

De-

Problema quintum.

II

	Gr.	Per multiplic. & diuisionē.	Per additionē & subtract.	Per simplicem additionem
A.	80. 18 Si.	E. 98570	Log.	To.2. O. 1000625
B.	75. 42 Si.	F. 96902	Log.	K. 998633
C.	30. 15 Si.	G. 50377	Log.	L. 970224
D.	29. 41 Si.	H. 49525	Log.	M. 1968857
			N. 969482	R. 2967482
P.	4881632054	Q. 49524	51374 98570	

Deniq; per simplicem additionem idem haberi potest. Ad cuius intelligentiam considerandum est, quod si, ubi est Logarithmus, I, ex, M, subtrahendus, ille non subtrahatur, quin potius eidem, M, seu ipsi, K, L, addatur numerus, quo ipse Log. I excedit à Radij duplo Logarithmo, qui est 2000000 (quod uoco residuum Logarithmi, I, habeturq; subtrahendo ipsum Log. I ex 2000000) nempe addatur 1000625; tunc ut refert Log. N, negum ex dictorum trium facta summa erit subtrahendus Log. I, sed etiam tale residuum 1000625 (qui simul faciunt 2000000) nempe ex eadem summa, erit demendus 2000000, & sic remanebit idem Log. N, qui prius habebatur, subtrahendo Log. I, ex, M. At ipse 2000000 facile subtrahitur, sicutum ultimo loco ad sinistram nota 2, seu Binarium aut pratermittatur, aut, si scribitur, deleatur in facta summa, cum ciphra non alterent eiusdem summa notas: ergo tali ratione per simplicem additionem residui Logarithmi ipsius, I, nempe numeri 1000625 facta cum, M, seu immediatè cum Logarithmis, K, L, idem Log. N, haberi potest. Vt in tertio superiori calculo videre licet, in quo si numerum, O, 1000625 addas cum, K, L, fit summa idem Log. N, pratermissis tamen dicto Binario, quod ultimo ad sinistram loco venit.

Considerandum est insuper in Logarithmis Canonis hanc esse proprietatem, ut cuiuscunque arcus Log. & Tom. 2 simul additi component duplum Logarithmi Radij, hoc est 2000000. Seu eiusdem Logar. 2. ac Tom. aut Mes. & Mes. 2. Vt graduum 20.47 Log. 955003, & To. 2, qui est 1044997, faciunt 2000000: sic Log. 2, qui est 997078, & Tom. 1002922: ac Mes. 957925, cum Mes. 2, qui est 1042075, pariter faciunt 2000000.

Hæc ergo proprietates merè nobis optatum Logarithmorum residuum suppeditare potest, ut vel hoc solo fine Tomologarithmos, alias non necessarios, in Canone duxerim retinendos. Volens enim ex gr. residuum Log. I, non est opus ipsum, I, subtrahere ex 2000000 (ut in Vers. & Logarithmis Chiliadis facere opus erit) sed illud habetur in, O, Tom. 2 eorundem graduum, A, quorum, I, est Log. Etenim vides ex, I, & O, fieri

2000000, unde si pro, I, subtrahendo addas ipsum, O, cum, K, L, & à summa, R, auferas 2000000, seu dictum Binarium proueniens ultimo loco ad sinistram, remanebit ut supra dicebatur Log. N, idem, qui per additionem, & subtractionem iuxta secundum calculum habebatur.

Quoniam autem in Regula Trium absolueda non semper sola Sinus, sed & Tang. ac Sec. Si. vers. & numeri absoluti mixtim interuenire possunt, & consequenter non soli Sinuum Logarithmi, sed & aliarum linearum, ac numerorum absolutorum: quorum quilibet poterit in primo loco Regula reperiri, propterea sequenti Tabella declaratur pro quouis Logarithmo subtrahendo, quis vice illius sit addendus. Ex eadem ergo intelligitur, si in Regula Trium alius arcus, vel anguli, ut, A, debeat in primo loci ponere Log. vi, I, subtrahendus ex summa Logarithmorum secundi, & tertii arcus, seu anguli, B, C, ut contingit in superiori calculo, quod pro eo substituendus est Tom. 2, ut, O, eiusdem, A, addendus eidem secundi, & tertii Logarithmis. Et si ibi ponendus esset ipsius, A, Log. 2 subtrahendus, pro eo substitueretur Tom. eiusdem, A, addendus. Erit a pro Mes. Mes. 2, & pro Mes. 2 Mes. &c. accipiendus esset. Pro Vers. autem, & numeris absolutis debet prius Vers. seu numerorum Log. inueniri iuxta Problema primum, & tertium, illiq; subtrahi ex 2000000, cuius residuum erit addendum. Vt prius cum residuum Log. Radij ad 2000000 sit 1000000, quotiescunq; Radius sit in primo loco, esset addendum hoc eius residuum, & ex summa Binarium auferendum, ac melius erit si pro eo addas ciphram, seu nihil, & ex summa tunc auferas tantum unitatem. Caterum ipsa Regula Trium quoad reliqua iuxta superius exemplum in omnibus absoluitur. Porro sciat Lector Epilogi ultimo loco positi Regulas iuxta hunc tertium modum fuisse concinnatas, ut omnes Trigonometricæ operationes ad simplicem additionem reducerentur. Et tandem recordetur eadem intelligenda esse, si Logarithmi Canonis sumantur plurius, vel pauciorum notarum, ut ex, gr. ad Radij Logar. 10, 0000000, tunc enim residuum Logarithmorum capietur non ad 2000000, sed ad 200000000, & sic &c.

Tabella computationis cuiusq; Logarithmi subtrahendi (quia sit in primo loco Regula Trium) in Logarithmum, seu residuum addendum.

Congruit à prædictis excipere Radij, cuiusq; Logarithmi, qui est 1000000 sumere residuum ad eundem 1000000, nepe pro eius residuo sepe ponere ciphram, & in summa deleat pro Binario tantum unitatem; & hoc propter eius in calculis creberrimum usum.

B 2

T a.

Card. est 10, quem idcirco virgula separauit.

Ex Arith. vulgari.

Iuxta Regulam Carac.

tionem, & subtractionē Logarithmorum, in eorundem usu generalis, & consuetus; quo, relicto tertio subsistenti, quilibet prolixo etiam uti poterit.

Tabella commutativa Logarithmi cuiusvis subtrahendi in Logarithmum, seu residuum addendum in praxi Regula Trium.

Si alicuius arcus, aut anguli sit subtrahendus	Adde eiusdem
Logarithmus	Tomologarithmus 2.
Log. 2	Tom.
Mes. 2	Mes. 2
Mes. 2	Mes. 2
Tom. 2	Log. 2
Tom. 2	Log.
Aut Vers. seu Vers. 2, vel Numeri absoluti Logar.	Residuum ad 2000000: Et pro his omnibus dele in summa Binarium ultimo loco ad sinistram
Aut Radij Logar.	Semper Ciphram: & tunc in facta summa dele tantum Vnitatem.

His animaduersis, si Lectorem piget sequentia percurrere, saltem videat Definitiones Trigonometriae sphaericae, & deinde se conferat ad Regulas Epilogi exercendas, hac enim etiam sufficere possunt.

Superioribus verò perceptis, nobis ad rem propius accedentibus nunc videndum est quomodo hucusque tradita propositis quibuscunque triangulis applicentur: quod per sequentia Axiomata, ac Problemata prius in Triangulis rectangulis, & postmodum in obliquangulis licebit intelligere.

Axioma primum Planorum lineare.

IN Triangulis planis rectangulis vnumquodque latius pro Radio poni potest, ad Canonem Trigonometricum conuenienter.

Si ergo Hypotenusa ponatur pro Radio, crura eua-

dunt Sinus oppositorum ipsius acutorum.

Si vero alterum crurum ponatur pro Radio, reliquum crus est Tangens, & Hypotenusa Secans anguli ex aduerso Tangentis constituti.

Demonstratio.

Qui ignorat **S**it in septima figura propositum quodcunque triangulum, A C B, rectum habens angulum, vt, A B C; centro vero, A, & intervallo hypotenusa, A C, describatur, E F, arcus, qui sit quarta circuli pars, terminans ad productam, A B, in, F, & ad, A E, ipsi, C B, æquidistantem ductam, vt in, E; sitque etiam ducta, C D, parallela ipsi, A F. Manifestum est ergo ex definitione Radij, & Sinus, Num. 70, & 20 præludiali tradita, A C, hypotenusam pro Radio positam fuisse; reliquorum vero laterum, seu crurum, C B, B A, ipsam, C B, esse Sinum arcus, C F, & consequenter esse Sinum subtenso eidem anguli, C A B: similiter & C D, esse Sinum arcus, E C, & subinde ipsum, vt, ipsi æqualem, A B, esse quoque Sinum anguli, E A C, vel anguli, C A B, illi coalterni & ideo

34 Primi
Elem.

æqua-

Axioma prim. Prob. sextum. 13

29 Primi
Elem.

æqualis: hoc est quia, A C, hypotenusa posita est pro Radio, crura, C B, B A, sunt Sinus oppositorum ipsius angulorum acutorum, A, C, ut prior pars Axiomatis docet. Quod si, ut in figura 8, eiusdem trianguli, A B C, centro, A, & intervallo, A B, circumscribatur maior arcus ad Radium, A B, describatur arcus circuli, B F E, sit, B C, Tangens, & A C, Secans arcus, F B, seu anguli, A, ini-

noris acuti. Vel si ad Radium, C B, crur minus fiat arcus circuli, B F E, ut in figura 9, euadit, B A, Tangens, &, C A, Secans arcus, F B, seu anguli, C, maioris acuti: & hoc per definitiones Tangentis, & Secantis, quæ habentur Num. 15, & 16 præludiali; quod est posteriori Axiomatis parti conforme. Patet ergo veritas Axiomatis quoad utramque partem.

Ex def. Tag.
& Sec. Num.
15, 16 prælud.

PROBLEMA SEXTUM.

In quocumque Triangulo rectangulo, datis angulis, lateram proportionem manifestare.

32 Primi
Elem.

NOTA prius in triangulo rectangulo dato uno acutorum, ut gr. 20, dari & reliquos duos angulos: quia cuiuscunque trianguli tres anguli æquantur duobus rectis, seu gradibus 180, unus autem reliquorum est rectus, hoc est gr. 90, & subinde datus, ergo reliqui duo facient gr. 90, quorum unus ponitur datus, nempe gr. 20, ergo & reliquus acutus erit datus, hoc est gr. 70 prædicti complementum.

Est igitur in fig. 7 idem triangulum, A B C, in quo angulus, C A B, sit gr. 28. 15, erit subinde reliquus acutus, A C B, eius comp. gr. 61. 45, & A B C, rectus est gr. 90. Nunc his datis oportet manifestare proportionem, quam habebunt, A C, A B, B C, inter se, quod ex numeris Canonis sic obtineri poterit. Iam scis eisdem cuiuscunque circuli siue parui, siue magni Radio, ac Sinibus, Tangentibus, & Secantibus convenire iuxta dicta Num. 20 prælud. Et si enim Radius siue parvus, siue magnus supponatur particularum 1000000, seu 100000, ille tamen particula in Radio, Si. Ta. & Se. parui circuli paræ erunt. & in magno magna. Cum ergo in triangulo, A B C, ponatur, A C,

tanquam Radius, iam intelligis iuxta nostrum Canonem ipsum, A C, æqualem Radio, A F, esse particularum 100000 Sinum, nempe gr. 90. Quoniam vero ex dictis, C B, est Sinus anguli, A, gr. 28. 15, ideo si in Canone queratur Sinus graduum 28. 15, ille inuenietur esse eandem particularum 47332 unde, C B, erit 47332, qualium est, A C, 100000. Eadem ratione cum angulo, C, gr. 61. 45, (qui est in eadem linea & regione gr. 28. 15, sed in altera facie, quippe qui est eius comp.) reperietur Sinus, A B (quia æquivaleret ipsi, D C) eandem particularum 88089. Alio modo potest haberi eorundem laterum proportio iuxta fig. 8. Etenim cum crur maius, A B, in eodem triangulo, A B C, ponatur pro Radio, illud erit 100000, B C, vero Tangens anguli, A, gr. 28. 15, erit 53732, & Secans, A C, 113521 eorundem particularum. Et tandem iuxta fig. 9, erit, C B, Radius 100000, ac, B A, Tangens anguli, C, graduum 61. 45, inuenietur 186109, & C A, eiusdem Secans 211274. Tripliciter ergo, datis angulis, habetur ratio laterum, prout singula latera pro Radio substituantur, ut hic patet, nempe

Primus modus
inquirendi
proportionem
laterum
in triangulis
rectangulis.

Secundus
modus.

Tertius
modus.

Canon triangulorum aptatur cuiuscunque circulo, siue paruo, siue magno: & subinde cuiuscunque triangulo &c.

Vel sic in fig. 7.

Proportiones laterum.

Iuxta primum
modum.

A C, Radius æqualis Sinui graduum 90
C B, Sinus anguli, A, gr. 28. 15, nempe
A B, Sinus anguli, C, gr. 61. 45, nempe

100000
47332
88089

Vel sic in fig. 8.

Iuxta secundum
modum.

A B, Radius, & Sinus graduum 90
B C, Tangens anguli, A, gr. 28. 15, nempe
A C, Secans anguli, A, gr. 61. 45, nempe

100000
53732
113521

Vel sic in fig. 9.

Iuxta tertium
modum.

C B, Radius, & Sinus graduum 90
B A, Tangens anguli, C, gr. 61. 45, nempe
C A, Secans anguli, C, gr. 61. 45, nempe

100000
186109
211274

34 Primi
Elem.

P R O -

PROBLEMA SEPTIMUM.

In quocunq; triangulo rectangulo, dato prater angulos unicolatere in quavis supposita mensura, in eadem reliqua duo ignota latera nota reddere.

Pont' semper
pro Radio la-
tus datum.
Vfus Regula
Trium in trian-
gulis rectan-
gulis.

PRIVS iuxta Problema antecedens quare proportionem illorum duorum laterum, quorum vnum datum habes, & aliud quæris, & nota eorundem numeros e Canone extractos, qui expriment talem proportionem: congruet autem calculi facilitati ponere semper pro Radio, seu tanquam 100000 ipsum la- tus datum. De inde per Regulam Trium iuxta Probos vel per lineas, vel per Logarithmos institutam, fac ut numerus tabularius (quem ex Canone descripsisti) dati lateris ad numerum eiusdem dati, sed in assumpta mensura extra Canonem, ita numerum tabularium lateris quæsitum ad quartum, qui erit numerus lateris quæsitum in eadem mensura extra Canonem assumpta.

Ut ex. gr. esto in fig. 7 planum acclive, cuius reclinatio acclivitatis sit, A C, eiusq; angulus

inclinatio super horizontem ipse, C A B, gr. 23. 12, velit autem quis scire cum ab, A, progressus fuerit super, A C, pedes ex. gr. 150, ut usque in, C, quanta tunc erit eius altitudo super planum horizontale, A F, & ipsius distantia horizontalis ab, A, nempe quot pedes sit, C B, &, B A. Quia ergo, A C, hypotenusa ponitur esse p. 150, ipsam quoq; ponemus pro Radio, intelligeturq; in Canone esse 100000, unde iuxta priorem partem Axiomatis, C B, erit Sinus anguli, A, gr. 23. 12, hoc est 39394, qualium, A C, est 100000; eiusq; Log. 959543, & B A Sinus comp. ipsius, A, nempe Sinus anguli, C, gr. 66. 48, qui est 91914, eiusq; Log. 996338, erit ut in dato latere, A C p. 150 notificemus pedes ipsius, C B, sic instituetur Regula Trium tam per lineas, quam per Log. iuxta tertium modum Probos, inuenieturque, C B, esse pedes 59. 091.

Possent etiam iuxta 16 Quæti Elem. hoc est permutando, fieri ut, A C, Radius ad, C B, Sinum ipsius, A, ita, A C, data, ad, C B, datam, & eodem modo in ceteris analogis, at in sequentibus prior modus retinebitur.

Per dicta Prob. 3 circa Regulam Canonis Log.

In fig. 7	Per lineas		Per Logarithmo	
Ut, A C, Radius, seu gr. 90 Sinus, semper datum	100000	r l	0	
Ad datam, A C, pedes 150	150	l	217609	
Ita, C B, tanquam anguli, A, gr. 23. 12' datum Sinus	39394	l	959543	
Ad quæsitum, C B, pedes	59. 091	l	177152	dat p. 59. 1

Et nota per lineas multiplicatum fuisse 150 cum 39394, & productum 5909100 divisum fuisse per 100000 (quod compendiosè sit puncto separando ad dexteram quinq; notas) & sic provenisse quæsitum, C B, p. 59. 091 relictis ultimis ciphris. Per Logar. verò p. 0 Res. Log. (quod notatur per, r l) posita est ciphra iuxta monicum Tabellæ Prob. 5; pro numero 150 posita est Log. 217609, & Chiliade extractus iuxta Prob. 3; pro Sinu graduum 23. 12' posita est Log. 959543, & Canone excerptus iuxta Prob. primum; & illi additi in unam summam iuxta Prob. 5 dederunt 177152, at iuxta

idem monitum prætermissa est unitas, que veniebat ultimo loco ad sinistram, remansitq; Log. 177152, cui in Chiliade quæsitum iuxta Prob. 4, ut 277152 mutata Carac. 1. in 2 inuentus est responderenumerus 591, sed propter Carac. 1. puncto una ad dexteram separata nota, numerus dicto Logar. congruus fuit p. 59. 1 nempe, C B, quartus proportionalis quæsitus, idem ferè ei, qui per lineas inuentus est. Pro ipsa verò, A B, in pedibus pariter notificanda, sic Regula Trium instituetur, & ipsa, A B, inuenietur esse p. 137. 871.

In fig. 7	Per lineas		Per Logarith.	
Ut, A C, Radius	100000	r l	0	
Ad datam, A C, pedes 150	150	l	217609	
Ita, A B, tanquam anguli, C, gr. 66. 48' datum Sinus	91914	l	996338	
Ad quæsitam, A B, pedes	137. 871	l	213947	dat p. 137. 870

Hic

Problema septimum.

15

Iuxta Prob. 4

Nempe factu
est ut 316 ad
1000, ita
275 ad 870.

Hic in Chiliade quarentes Log. 213947, inuenimus proximè minorem 213672 dantem p. 137. & cum differentia 316 subsequenti, ac minori differentia 275 (nempe quæ est inter 213672 proximè minorem tabularum, & nostrum 213947) ductam per 1000 (ut haberemus tres notas post punctum) prouenerunt fractione decima 870, unde, A B, per Log. inuentus quoz; est p. 137. 870, seu p. 137. 87, seu per lineas.

Si verò latus datum esset alterum crurum, inuenta ut supra ratione lateram, eodem modo institueretur Regula trium pro reliquis lateribus notificandis.

Ut in fig. 8 esto, A B, distantia horizontalis oculi, A, ab alicuius Aedificij altitudine, C B, p. 200, & A, angulus altitudinis illius verticis, C, gr. 15. 37; libeat autem scire tam, C B, quam, A C. Cum ergo sit datum crus, A B, p. 200, ipsum quoq; relatiue ad Canonem ponemus pro Radio, seu 100000, eritq; per posteriorem partem Axiomatis, B C, Tangens anguli, A, gr. 15. 37, nempe 27952, ac Mes. 944641, & A C, eiusdem Secans 103833, & Tom. 1001634: ergo Regulam Trium tam proponendo, B C, quam, A C, sic instituendo, inuenietur, B C, p. 55. 904, & A C, ped. 207. 666.

In fig. 8	Per lineas		Per Logarithmos	
Ut, A B, Radius	100000	r l	0	
Ad datum, A B, pedes	200	l	230103	
Ita, B C, tanquam anguli, A, gr. 15. 37, data Tangens	27952	m	944641	
Ad quesitam, B C, pedes	55. 904	l	174744	dat p. 55. 904

In fig. 8	Per lineas		Per Logarithmos	
Ut, A B, Radius	100000	r l	0	
Ad datum, A B, pedes	200	l	230103	
Ita, A C, tanquam anguli, A, gr. 15. 37, data Secans	103833	r	1001634	
Ad quesitam, A C, pedes	207. 666	l	231737	dat p. 207. 670

Notas in calculis breuissimas vsurpamus, nempe, l, pro Log. m, pro Mes. & t, pro Tom. r l, pro Ref. Log. l 2, pro Log. secundo, m 2, pro Mes. secundo, & t 2, pro Tom. secundo, iuxta Num 28 præludiale. Eodem verò modo ex dato crure minori, C B,

& angulo, C, argueremus tam, B A, quam, C A, iuxta fig. 9. Hoc est ex dato quouis trianguli, A B C, latere in fig. 7, 8, & 9, reliqua duo sic in eadem mensura notificabuntur.

PROBLEMA OCTAVVM.

In quocunq; triangulo rectangulo, datis duobus quibuscunq; lateribus in quavis mensura, angulos, & subinde tertium latus in eadem mensura notificare.

ALTERVM datorum ponè pro Radio, ipsumq; statue tanquam datum in primo loco Regulæ Trium, in secundo pone idem tanquam Radium, & in tertio loco reliquum latus datum, absolutaque Regula vel per lineas, vel per Log. habebis quactum, qui erit Sinus anguli oppositi, si latus positum pro Radio fuit hypotenusa: vel Tangens, si illud fuit alterum crurum, & reliquum datorum reliquum crus: aut Secans, si Radius

fuit alterum crurum, & reliquum datorum hypotenusa, cum quo Sinu, Tang. vel Sec. capies angulum illis congruentem, ex quo reliquum quoq; acutum obrinebis, & subinde per Prob. ant. etiam tertium latus notificare poteris.

Ut si sit arbor altitudinis pedum 50, cuius versus verticem pari detruncatur (quam nobis in fig. 7, & 9 referat, A C) p. 30, pars vero relida sit, B C, p. 20, & quaratur, A B, distantia, quam habebit vertex, A, Terra pro-

Ex datis hypotenusa, & altero crure, angulos, &

Hoc elicitur ex præmissis Axiomate.

cum-

set etiam
ra 16 Qu
Elem. hoc
permuta
fieri ut
C, Radius
C B, Sinu
us, A, ita
C, data,
C B, data,
ut modo
lateris a
gy, at in
uentibus
r modus
uebitur.

distia
3 circa
ulam Ca
Log.

reliquū crux inuenire. Nota pedum 30 Log. esse 147712, qui demendus est ex 2000000 duplo Logar. Radij, & restat Ref. Log. 1852288 ponendus in primo loco primi calculi. In falsa verò summa Binarium praetermittitur iuxta monitiū Tabellae Problema. 5. Eadem in posteriori calculo pro sumendo Ref. Log. pedum 20 pariter sunt obseruanda iuxta dista. Prob. 5.

Vel in fig. 7.	Per lineas		Per Logarith.
Vt data, AC, hypotenuſa pedes	30	r l	1852288
Ad, AC, Radium	100000	l	1000000
Ita data, CB, pedes	20	l	130103
Ad, CB, anguli, A, quaſiti gr. 41. 48'. 38" Sinum	66667	l	982391

Vel in fig. 9.			
Vt datum, CB, crux pedes	20	r l	1869897
Ad, CB, Radium	100000	l	1000000
Ita data, CA, pedes	30	l	147712
Ad, CA, anguli, C, quaſiti gr. 48. 11'. 23" Secantem	150000	l	1017609

Tandem verò, habito angulo, C, gr. 48. 11'. 23" per ſequentem analogiam inuenitur iuxta Problema anteced. crux, AB, ped. 22. 36080.

In fig. 7.			
Vt, AC, Radius	100000	r l	0
Ad datum, AC, pedes	30	l	147712
Ita, AB, tanquam anguli, C, gr. 48. 11'. 23" dat. Sinus	74536	l	987236
Ad quaſitum, AB, pedes	22. 36080	l	134948

Idem verò, AB, poteſt haberi, ſi quadratur, BC, 20, & CA, 30, ſiatq; quadratum, BC, 400, & quadratum, CA, 900, à quo dempto 400, remanebit numerus 500, cuius radix quadrata erit, AB, p. 22. 36 fere vt ſupra. Ergo diſta arboris vertex, A, diſtabit ab eius pede, B, p. 22. 36. Eſto nunc in fig. 8, vel 9, CB, altitudo ali-

In fig. 8.	Per lineas		Per Logarith.
Vt data, AB, umbra partes	28	r l	1855284
Ad, AB, Radium	100000	l	1000000
Ita datum, BC, umbrōſum partes	12	l	107918
Ad, BC, anguli, A, quaſita altitudinis gr. 23. 12' Tangentem	42857	m	963202

Poſſet etiam vt in fig. 9 poni pro Radio, CB, & vt, CB, p. 12 ad idem, CB, 100000, ita fieri, BA, p. 28 ad, BA, 233333 Tangentem anguli, C, gr. 66. 48', cuius comp. eſſet, A, gr. 23. 12', vt ſupra quoq; inuentus eſt. Porro ſi feceris in fig. 8, vt, AB, Radius 100000 ad, A, C, Secantem anguli, A, gr. 23. 12', quæ eſt 108798, ita, AB, p. 28 ad

quantum 30. 46, fiet nota, AC, p. 30. 46 iuxta Probl. antecedens. Alio modo ſi ipſorum, AB, 28, &, BC, 12 quadrata 784, & 144 ſimul addes, ſumma 928 radix quadrata p. 30. 46 erit, AC, pariter vt ſupra. Et hæc circa reſtanguſa ſufficiant, nunc ad obliquangula tranſeamus.

Idem per radij quadratam inueniuntur 47 Primi Elem.

Vide Epilogum Regularum pro Planis reſtangularis in fine.

axio.

Axioma secundum Planorum lineare.

IN Triangulis planis uniuersis latera Sinibus angulorum ipsis oppositorum sunt proportionalia.

Demonstratio.

5 Quarta
Elem.

Nu. 14 pral.

Elicitur ex
20 Tertia
Elem.

ID patet, nam cuilibet triangulo plano potest circulus circumferibi, in quo eius latera sunt chordae subtendentium arcuum, quarum medietates sunt Sinus semiaruum, & ideo sunt etiam Sinus oppositorum angulorum, qui distant semiaribus aequantur: ergo latera, quae sunt dictorum Sinuum dupla, erunt ut ipsi Sinus oppositorum angulorum.

Vel id in fig. 10, & 11 triangulis, ACH, (quorum angulus, AHC, in fig. 11 ponitur obtusus, & ceteri acuti) sic probabitur. Centris enim, C, H, Radijs aequalibus, C E, H F, deferbantur arcus, B E, I F, & à punctis, B, A, I, perpendiculares demittantur

super, CH (productam in fig. 11) nempe, B D, AK, I G. Est ergo, B D, Sinus anguli, C, & I G, Si. anguli, H, acuti in fig. 10, & obtusi in fig. 11. Quia vero triangula, B C D, A C K, sunt æquiangula; veluti &, AK H, I G H, eo quod, B D, I G, sint parallelae ipsi, AK: erit ut, CA, ad, AK, ita, C B, vel illi æqualis, I H, ad, B D; & ut, KA, ad, AH, ita, G I, ad, I H, ergo ex æquali in perturbata analogia, ut, CA, ad, AH, ita erit, I G, ad, B D, & permutando, ut, CA, ad, I G, ita erit, AH, ad, B D, hoc est latera Sinibus oppositorum angulorum erunt proportionalia.

Nu. 14 pral.

21 Quinta
Elem.

PROBLEMA NONVM.

In triangulis planis uniuersis, datis duobus cruribus, & angulo uni eorum opposito, ac data specie anguli reliquo datorum oppositi, hanc nozum reddere, necnon angulum verticalem, & basim.

Iuxta Axioma secundum.

FAC ut crus dato angulo oppositum ad Sinum anguli oppositi, ita crus quæsito angulo oppositum ad Sinum anguli quæsit, cuius speciem, nempe an sit acutus, vel obtusus non ignoras. Ut in fig. 12 sint data interualla horizontalia, AB, milliaria 30, & AC, milliaria 20 loci, A, à locis, B, C, necnon angulus, B,

positionis duorum locorum, A, C, gr. 35. 19, & quaratur angulus, C, positionis duorum locorum, A, B, quem supponamus esse acutum. Sic ergo instituta Regula Trium inuenietur, C, esse gr. 60. 7. Notis, C, & B, per eorum simul iunctorum subtractionem à gr. 180, emerget, A: Et per sequens Problema etiam interuallum, B C, haberi poterit. Est ergo.

32 Primi
Elem.

In fig. 12.	Per lineas		Per Logarith.
Ut datum crus, AC, milliaria	20	rl	1869897
Ad dati anguli, B, gr. 35. 19 Sinum	57309	l	976200
Ita datum crus, AB, milliaria	30	l	147712
Ad anguli, C, quæsit gr. 60. 7 Sinum	86703	l	993809

Cum angulus quæsitus supponetur obtusus, ut in fig. 11 est, AHC, inuenio illius Sinu, I G, is in Canone dabit angulum acutum, AH K, cuius subinde suppl. erit angulus, AHC, quæsitus. Scis enim eundem Sinum conuenire dato angulo, & eius supplemento, & propterea, cum inuenio Sinu, sit ambiguum an cum eo sit sumendus obtusus, vel acutus, & cum possit fieri duplex

triangulum habens eadem duo data crura, cum angulo uni eorum opposito noto (ut patet in fig. 20, in qua posito quod sint, D T, DH, equalia, si dentur duo crura, C D, DH, cum angulo, C, eadem quoque data habet triangulum, C D T, sed in, C D H, quæsitus angulus, H, erit acutus, & in, C D T, erit obtusus) quæsit anguli species quoque dari debet.

Nu. 14 pral.

C

PRO.

Ex datis cruribus inueniuntur angulos.

dem per hanc quadratum intra 7 Primi Elem.

PROBLEMA DECIMUM.

In triangulis planis vniuersis, datis duobus angulis, & crure uni eorum opposito, reliqua notificare.

Iuxta Axioma 2.

FAC vt Sinus anguli dato cruri oppositi ad ipsum eius oppositum, ita Sinus reliqui anguli dati ad reliquum eius datum.

Vt in fig. 12 sit datum duarum stationum, utrunq; electarum, A, C, interuallum, AC, p. 85. & per instrumentum capiendi angulos, ut per Quadrantem, seu Astrolabium, aut

aliud quodcunque sint obseruati in stationibus, A, C, angulus, A, gr. 56. 18', & angulus, C, gr. 70. 45', quorum summa gr. 122. 3' dempta ex gr. 180 relinquet angulum, B, gr. 58. 57'. Si ergo ex notis duobus angulis, B, C, ac crure, AC, ipsi, B, opposita erit, seu interuallum, AB, velimus inueigare, sic instruetur Regula Tertia.

Pro Loge, Sinus, B, subtrahendo positus est tam. 2 addendus iuxta Tabellam Prob. 5, dempro in summa Binario & c.

In fig. 12.	Per lineas	Per Logarith.
Vt dati anguli, B, gr. 58. 57' Sinus	85672	1006716
Ad datum, AC, pedes	85	197942
Ita dati anguli, C, gr. 70. 45' Sinus	94409	997501
Ad quæsitum, AB, pedes	93 57269	197159
Sed pedes	93. 67.	

Fractionem, que venit in diuisione, computauimus in fractionem decimam iuxta Num. 24 præludiale, quam cum iisdem pedibus dedit quoq; Log. 197159. Eadem

ratione ex notis, AC, crure, & angulis, B, A, notificaretur, BC. Hoc vero Problema est in Altimetria præstantissimum.

Vtut huius Prob. maximus est in Altimetria.

Axioma tertium Planorum lineare.

IN Triangulis planis vniuersis vt summa duorum quorumuis laterum, seu crurum est ad eorum differentiam; ita Tangens dimidij summæ duorum angulorum ad basin, est ad Tangentem differentiæ intra, vel supra dimidium.

Demonstratio.

2 Sexti Elem.

Sint in fig. 13 triangulum, DBC, in eo que assumpta crura, DB, n. ius, & BC, maius ac Radius, BD, circulus, ADE, describitur, periphæria notans, F, in BC, & E, in DC; extensa vero, CB, in A, iungatur, AD, & in, S, bifariam secetur, connectaturque, BS, ac ipsi, CD, acta parallela, BK, occurrat ipsi, AD, in K; & tandem sumatur, SO, æqualis ipsi, SK. Est ergo, DK, ad KA, vt, CB, ad BA, & componendo, DA, ad AK, vt, CA, ad AB; & consequentibus duplicatis, DA, ad AK,

cum, OD, vt, CA, ad, AF, & per conuersionem rationis, DA, ad, KO, seu dimidium ad dimidium, hoc est, AS, ad, SK, vt, AC, ad, CF, seu vt summa crurum, DB, BC, ad eorum differentiam, FC. Cum vero, ASB, sit angulus rectus, in triangulo, ASB, &, KSB; si crur. BS, fiat Radius (nempe centro, B, interuallo, BS, circulus describatur) per Axioma primum ipsi, SK, SA, euadent Tangentes angulorum, S BK, SBA. Sed, SBA, est dimidium ipse, ABD (quia, AB, æquatur, BD; BS, est commu-

3 Tercij Elem.

Axiomatis primi pars posterior.

nis,

Axioma tert. Prob. decimum. 19

8 Primi
Elem.
32 Primi
Elem.
29 Primi
Elem.

nis, &c. A S, S D, sunt æquales) &, A B D, æquatur duobus, B C D, B D C; ergo, A S, est Tangens dimidij summe angulorum, D, C: & est, K B S, differentia inter angulum, A B K, seu, C, interiorem, & dimidium di-
stæ summe nempe, A B S; seu inter angu-
lum, K B D, vel illi coalternum, & æqua-

lem, B D C, ac, D B S, cuius Tangens osten-
sa est, K S. Ergo ut summa crurum, D B,
B C, ad eorum differentiam, F C, ita Tan-
gens, A S, dimidij summe angulorum,
A B K, K B D, vel, C, D, ad Tangentem,
K S, differentie ipsorum angulorum, D, C,
infra, vel supra eandem semisummam.

Corollarium.

Hinc innotuit quod, si illa differentia, hoc
est angulus, K B S, addatur ipsi semisu-
mæ, ut ipsi, S B D, fiet angulus, K B D, seu,

B D C, maior: & si dematur ab eadem, ut ab
angulo, A B S, fiet angulus, A B K, seu
B C D, minor.

PROBLEMA VNDECIMUM.

*In triangulis planis vniuersis, datis duobus cruribus, &
angulo verticali, angulos ad basim patefacere,
& subinde etiam ipsam basim.*

Iuxta Axioma
tert. eius-
que Corolla-
rium.

FAC ut summa crurum ad eorum dif-
ferentiam: ita Tangentem semisum-
me angulorum ad basim ad Tangen-
tem differentie, quæ adde semi-
summe fiet angulus maior, deinde fiet angu-
lus minor.

Afferam verò exemplum illis duobus con-
forme, quæ pro calculo Martis habentur in sup-
plemento Ephemeridum Magini Canone 10, ut
intelligat studiosus Trigonometriam planam.
Astronomia pariter mirificè deservit. Sit ergo
in fig. 14. circulus, A F P G, qui concipiat
esse in plano Eclipticæ, in cuius centro, S, sit
Sol, terra verò in, T, per qua transeat diame-
ter, A S T P, & M, sit locus Martis eccentrici
in Eclipticæ, punctum in quam, super quod
Mars perpendiculariter imminet. Supponatur
verò, M S, distantiam Martis à Sole esse

165304. & S T, distantiam Solis à Terra ean-
dem partem 98210: & angulum, A S M, anoma-
lia orbis gr. 148. 44. 30, qui est æqualis
summe angulorum, S M T, S T M, cuiusq; di-
midium gr. 74. 22. 15. Quæritur autem an-
gulus, M, qui dicitur æquatio orbis. Triangu-
lum ergo, M S T, erit eiusmodi quale, D B C,
in fig. 13, cuius crura data sunt, M S, S T, &
dimidium anomalie, A S M, seruiet pro dimi-
dio summe angulorum ad basim, S M T, S T M.
Sic ergo iuxta Axioma præcedens instituta Re-
gula trium, prodit differentia gr. 42. 18. 22
quæ (cum, M, lateri, S T, minori quam, S M,
oppositus, sit minor angulo, S T M) demenda
est ex dimidio anomalie gr. 74. 22. 15, & reman-
ebit angulus, M, æquationis orbis quæsitæ gr.
32. 3. 53.

32 Primi
Elem.

19 Primi
Elem.

In fig. 14.

Per linesas

Per Logarith.

In Chiliade
quæritur est
Log. numeri
263, & eius
pari propor-
tionalis pro
reliquis notis
514, & la-
tus Logarith-
morum Carac-
teris, 5, de-
prius fuit à
2000000, ut

M S, Distantia Martis a Sole	165304		
S T, Distantia Solis a Terra	98210		
Ut summa ipsorum, M S, S T, laterum	263514	r l	1457920
Ad differentiam eorundem	67094	l	482668
Ita dimidij, A S M, nempe semianomalie orbis, gr.			
74. 22. 15, data Tangens	357457	m	1055322
Ad differentia subtrahenda, gr. 42. 18. 22 Tangen- tem	91013	m	995910
M, æquatio orbis quæ sita gr. 32. 3. 53.			

haberet
Ref. Logar.
eiusdem
1457920 pri-
mo loco ponē-
dum, & hoc
iuxta Prob.
3: sic reliqui
inuenti per
artē propor-
tionale cor-
recti sunt.

Nota quod operando per Logar. ipsius
summa Ref. Log. A, & differentie Log. B,
perseuerant ipe in pro e veteris locis Martis
in circulo, A F P G, ut pro, F, G, vnde suffi-
ciet illis addere, C, Mef. semianomalie, ut

semianguli, A S F, vel, A S G &c. (quæ in
præcedentia signorum computatur) & pro-
ueniet Mef. D, differentie, quæ dempta ex
semianomalie relinquet, F, G, æquationes
orbis. Porro adduntur ipsæ æquationes ve-

C 2

rò

Ius huius
Prob. maxi-
mè est in Al-
metria.

3. Tertij
Elem.

Axiomatis
primi pars
possetur.

ro loco Martis eccentrico in Ecliptica in-
priori senicirculo anomalie orbis, AF M P,
& subtrahuntur ab eodē in posteriori, AG P,
vt prodeat verus locus Martis in Zodiaco
Primi Mobilis.

Habitis angulis, poterit quoq; basis, TM,
obtinere, si fiat per Prob. 10, vt Sinus angu-
li, M, ad, S T (vel vt Sinus anguli, M T S,
ad, M S) ita Sinus anguli, M S T, ad, M T;
quæ erit distantia Martis à Terra.

Axioma quartum Planorum lineare.

IN triangulis planis vni-
uersis vt Radius ad Si-
num 2 anguli verticalis, ita

duplum facti à cruribus ad
differentiam inter quadrata
crurum, & basis quadratum.

Demonstratio.

Prima Sexti
Elem.

13 Secundi
Elem.

Per Axioma
primum.

Sit in fig. 15 quodcunq; planum trian-
gulum vel, AC B, cum angulo vertica-
li, C, acuto: vel, AF B, cum verticali angu-
lo, AF B, obtuso, & ab, A, cadat, A G, per-
pendiculariter super, C B, vt in, G. Est er-
go, A C, ad, C G (sumpta, C B, communi
altitudine) vt rectangulum, AC B, ad re-
ctangulum, B C G; vel vt duplum rectan-
guli sub cruribus, A C, C B, ad duplum re-
ctangulum sub, B C, C G, sed hoc est æqua-
le excessui quadratorum crurum, A C, C B,
super quadratum basis, A B: ergo vt, A C,
ad, C G, hoc est (posita in triangulo rectan-
gulo, A G C, pro Radio hypotenusa, A C)
vt, A C, tanquam Radius ad, C G, Sinum
anguli, C A G, nempe Sinum 2 anguli ver-

ticalis, C, ita duplum facti à cruribus, A C,
C B, ad excessum quadratorum, A C, C B,
super quadratum basis, A B. Eadem ratio-
ne ostendemus pro triangulo, AF B, vt, AF,
ad, F G, nempe vt Radius, A F, ad, F G,
Sinum anguli, F A G, hoc est Sin. 2 anguli,
AF G, vel, AF B, ita esse (sumpta commu-
ni altitudine, F B) rectangulum, AF B, ad,
G F B, vel duplum, AF B, ad duplum, G F B:
est autem duplum rectanguli, G F B, æqua-
le defectui quadratorum, A F, F B, à qua-
drato basis, A B. Ergo vt Radius ad Sinum
2 anguli verticalis, ita duplum facti à cruri-
bus est ad differentiam inter quadrata crurum,
& basis quadratum.

Prima Sexti
Elem.

12 Secundi
Elem.

PROBLEMA DVODECIMVM.

In triangulis planis vniuersis, datis cruribus, & angulo
verticali, basim, absq; angulorum eide adiacentium
notitia, inuenire.

Iuxta Axi-
oma quartum.

Iuxta 12, &
13 Secundi
Elem.

FAC vt Radius ad Sin. 2 anguli vertica-
lis, ita duplum facti à cruribus ad
differentiam inter quadrata crurum,
& quadratum basis: quam deme ex
quadratis crurum, si angulus verticalis est
acutus, adde iisdem, si est obtusus; & reli-
cti, vel conflati radix quadrata erit basis
quæ sita.

In eadem fig. 15 referat nobis, C, aliquem
portum, à quo discedant dua naves in diversas
Mundi plagas eiusq; angulo, C, graduum 50

inter se distantes: esto autem quod vna perue-
niens ad, A, fecerit miliaria 35, & alia ad, C,
vsq; ad, B, miliaria 58; & quod velimus sci-
re (absentes earum itineribus perinde ac si
fierent in rectis lineis) quot miliaris in situ,
A, B, inter se distent nempe quanta sit basis,
A B. Ducemus ergo, C A, 35 in, C B, 58, pro-
ductumq; 2030 duplabimus, vt sit 4060: Ac
ductis in se 35, & in se 58, faciemus quadrata
1225, & 3364, quorum summa erit 4589.
Deinde sic Regulam Trium inueniemus.

In

Axioma quint. Prob. duodecimum. 21

In fig. 15.	Per lineas	Per Logarith.
Vt Radius, AC,	100000	0
Ad dati anguli, C, gr. 50. 0' Si. 2.	64279	980807
Ira data duo facta a curvibus, AC, CB, nempe	4060	360853
Ad differentiam quadratorum, AC, CB, & quadrati, AB.	2610	541660
Hanc, quia, C, est acutus deme e quadratorum summa	4589	
Et fiet quadratum	1979	
Cuius radix quadrata erit, AB, quaesita, nempe miliaria.	44.4	

Axioma quintum Planorum lineare.

IN triangulis planis uniuersis vt latus maximum ad summam reliquorum laterum, ad segmentum lateris maximi: quo dempto, in relictis dimidium perpendiculum cadit.

Demonstratio.

IN eiusdem fig. 15 triangulo, ACB, supponatur nunc, CB, latus maximum, & A, centrum circuli, DCFE, ad intervalum, AC, non minori ipso, AB, descripti, cuius periphæria nolet in, CB, punctum, F, & in, AB, punctum, E; productaque, BA, vsq; ad circumferentiam vt in, D, perpendiculum, AG, super, CB, demittatur, quod bifariam secabit, CF, in, G. Erit ex-

go rectangulum sub prima, CB, & quarta, BF, æquale rectangulo sub secunda, DB, & tertia, BE: ergo prima, CB, seu latus maximum, ad secundam, DB, seu, CA, AB, summam reliquorum laterum, erit vt tertia, EB, differentia eorundem laterum, ad, FB, segmentum, quo dempto ex, BC, in relictis, CF, dimidium, G, perpendiculum, AG, cadit.

3 Tertij
Elem.
Cor. primum
36 Tertij
Elem. Com-
mandini.
16 Sexti
Elem.

PROBLEMA DECIMUM TERTIVM.

In triangulis planis uniuersis, datis tribus lateribus, angulos patefacere.

FAC vt latus maximum ad summam reliquorum, ita differentiam reliquorum ad segmentum lateris maximi, quo dempto in relictis dimidium perpendiculum cadit. Deinde cum habeas triagulum ad rectangula reductum,

in illis quæres quemuis angulum per Prob. 8, & sic angulos quæ sitos obtinebis.

Vt si in eadem fig. 15 intelligantur tres locorum distantia, AC, miliaria 13, AB, 20, &, BC, 21, & querantur eorum anguli positionum sic instruitur Regula Trium.

Iuxta Axioma quintum.

In

22 Problema decimumtercium.

In fig. 15.	Per lineas		Per Logarith.
Vi datum, B C, latus maximum milliaria	21	r l	1867778
Ad furcam, B A, A C, datorum	33	l	151851
Ita, E B, differentia, B A, A C, datorum	7	l	084510
Ad segmentum, B F, quaesitum	11	l	104139
Vnde, F C, erit	10		
Et eius dimidium, F G,	5		
Adde, B F, F G, fit, B G,	16		

Deinde in triangulo rectangulo, A B G, per Prob. 8.

Vi, B G, datum	16	r l	1879588
Ad, B G, Radium	100000	l	1000000
Ita, B A, datum	20	l	130103
Ad, B A, tanquam anguli, A B G, quaesiti gr. 36. 52			
Secantem	125000	s	1009691

Sic in triangulo rectangulo, A G C, cum, 67.23, vnde, B A C, eorundem summa gr. 104
3 C, 5, & C A, 13, inuenietur, A C G, gr. 15^o suppl. erit gr. 75.45.

PROBLEMA DECIMUM QVARTVM.

*In triangulis planis vniuersis, datis tribus lateribus, an-
gulos, absq; reductione ad rectangula,
notificare.*

FAC iuxta Axioma quintum (postpo-
sitis tamen prioribus duobus termi-
nis) vt duplum facti à cruribus que-
situm angulum ambientibus ad dif-
ferentiam inter quadrata eorundem crurum,
& basis quadratum: ita Radium ad Sinum
2 anguli quaesiti.
Vt si in eodem triangulo fig. 15, hsdem sup-
positis, sit inueniendus angulus, A: factis qua-
dratis crurum, B A, 20, & A C, 13, nempe

400, & 169, & eorum summa 569: rursusq;
facto quadrato basis, B C, 21, nempe 441: & p-
sum, cum sit minus, quam quadratorum sum-
ma 569 (subinde, C A B, erit acutus) ab ea-
dem subtrahemus, & remanebit differentia
128. Deinde ducti inuicem cruribus, B A,
20, & A C, 13, productusq; 260 duplatus, quod
faciat, 520, sic Regulam Trium insitruemus,
iuxta quam emerget, C A B, quaesitus gr. 75.
45, vt quoq; in Prob. ant. inuentus est.

13 Secundi
Elem.

In fig. 15.	Per lineas		Per Logarith.
Ipsum 24615			
Ita quā Sinus,			
vel 93912			
Ita quā Log.			
angulus est			
gr. 14. 15, sed			
vt Si. 2, vel			
Vi duplum facti à cruribus, B A, A C, datis	520	r l	1728400
Ad differentiam datorum quadratorum, B A, A C,			
& quadrati, C B,	128	l	210721
Ita Radium	100000	l	1000000
Ad anguli, B A C, quaesiti gr. 75.45 Si. 2	24615	l 2	930121

Log. 2 dant
eorum comp.
nempe gr. 75.
45, qui in
Canonis alte-
ra facie su-
muntur.

Et hæc sunt omnia data, & quaesita, quæ
in calculo triangulorum planorum, com-
muniter vsurpari solent. Alia verò extra-
ordinaria pro rectangulis habes in meo Di-
rectorio Par. 2, Cap. 2, pag. 112: & pro obli-
quangulis ibidem pag. 161.

PRO-

PROBLEMA DECIMUMQUINTVM.

*Omnia de triangulis obliquangulis præcedentia Problema
ia per reductionem ad rectangula absoluere: hoc est
per solum Axioma primum.*

DEMITTENDVM est perpendicu-
luni ab vno angulorum propositi
trianguli in latus oppositum (il-
ludq; productum, si opus est) ab
eo nempe, quo in altero factorum triangulo-
rum, ultra angulum rectum, duo quoque
nota haberi possunt. Cadit autem intra
triangulum, cum reliqui duo anguli sunt
eiusdem speciei, & extra, si diuersæ.

Sic igitur pro solutione Problematis 9, in
fig. 10, & 11, datis ex gr. C A, A H, & angulo
C, ac specie ipsius, H, quæ sit; demissoque
perpendiculo ab, A, communi termino dato-
rum laterum, H A, A C (quia sic in altero
factorum triangulorum, A C K, A K H, vt in
A C K, ultra angulum rectum, A K C, habentur
duo quoque nota, nempe, A C, & angulus, C) si fiat vt, C A, Radius ad, C A, datum
in alia mensura, ita, A K, Sinus anguli.
C, ad aliud, illud e. it, A K, datum in dicta
mensura. Deinde vt, A K, datum ad, A K,
Radius, sic erit, A H, datum, ad, A H, Secan-
tem 2 anguli, H. Vel etiam vt, C A, Secan-
s 2 anguli, C, ad, C A, datum, ita, A K,
Radius ad, A K, datum: deinde vel sicut
antea, vt, A K, datum ad, A K, Radius, sic,
A H, datum ad, A H, Secantem 2 anguli,
H. Vel vt, A H, datum ad, Radius, A H,
ita, A K, datum ad, A K, Sinus anguli, H,
his omnibus modis notificabilis.

Pro 10 Prob. datis in iisdem figuris duo-
bus angulis, vt, C, H, cum, A H, latere vni
opposito, non dissimili ratione habebitur,
A C, demisso ab, A, perpendiculo. Nam
erit vt, A H, Radius ad, A H, datum, ita,
A K, Sinus anguli, H, ad, A K, datum. Vel
vt, A H, Secans 2 anguli, H (nempe cum
est obtusus, vt in fig. 11, Secans excessus,
A H C super quadrantem) ad, A H, datum,
ita, A K, Radius ad, A K, datum. Deinde
in triangulo, A K C, vt, A K, Radius ad, A K,
datum, ita, A C, Secans 2 anguli, C, ad, A C,
datum. Vel vt, A K, Sinus anguli, C, ad,
A K, datum, ita, A C, Radius ad, A C, da-
tum.

Pro 11 Prob. supponatur nunc in iisdem
fig. 10, & 11 tanquam crura, A C, C H, quæ
sint data, cum angulo, C, verticali, & qua-
ratur anguli ad basim, A H. Hic perpen-
diculum demittendum est, non à, C, com-

muni termino datorum vt prius, sed ab, A,
vel ab, H, super oppositum latus, vt nunc
ab, A, super C H (productum in fig. 11) sic
enim habemus triangulum, A C K, in quo
præter rectum, A K C, ad sunt, A C, crus, &
angulus, C, data. Facies ergo vt, A C, Ra-
dius ad, A C, datum, ita, A K, Sinus an-
guli, C, dati ad, A K, datum. Vel vt, A C,
Secans 2 anguli, C, ad, A C, datum, ita,
A K, Radius ad, A K, datum. Deinde vt,
A C, Radius ad, A C, datum, ita, C K, Si. 2
anguli, C, ad, C K, datum. Vel etiam vt,
A C, Secans anguli, C, ad, A C, datum, ita,
C K, Radius ad, C K, datum. Cuius cum,
C H, sumpta, per subtractionem minoris à
maiore, differentia, K H; facies deniq; in
triangulo, A K H, vt, H K, datum ad, H K,
Radius, ita, K A, datum ad, K A, Tangen-
tem anguli, A H K, acuti, cuius suppl. est,
A H C, obtusus in fig. 11. Deniq; & basim,
A H, obtinebis, si facies vt, H k, datum ad,
H k, Radius, ita, A H, Secantem anguli,
A H k, ad, H A, datam basim.

Pro 12 Prob. eadem inquires, quæ pro 11
quæsiisti, deinde quadrata, A k, k H, da-
torum simul addes, & summæ radix qua-
drata erit, A H, basis quæ sita.

Tandem Prob. 13 per reductionem ad re-
ctangula cadentem super latus maximum,
perpendiculo, expeditur. Omnes ergo ca-
sus & per reductionem ad triangula rectan-
gula, & sine illa solui possunt.

Hinc si offeratur soluendum triangulum
æquicruræ, vt in fig. 15, C A F, æqualia ha-
bens crura, C A, A F; demisso ab angulo
verticali, A, perpendiculo, A G, illud in
duo triangula rectangula erit dislocatum,
vnde ex solutione trianguli, A G C, vel,
A G F, habebitur quoque solutio pro, A C F:
quod etiam pro æquilatæro intelligendum
est. Diuersa autem in ipsis datæ, & quæ sita
ex dictis faciliè discernes, vt & per proprias
Regulas eadem quæ sita tibi comparabis.

Nota autem, quod rectangulorum calcu-
lum per Logarithmos, hoc est totius planæ
Trigonometriæ, hæc vnica Regula genera-
li, quam voco Axioma primum Planorum,
Logarithmicum, quia ab eorum Axiomate
primo lineari pendet, memoriæ consignare
poteris.

Elicitur &
32 Primi
Elem.

Iuxta priorē
partē Axi-
omatis primi.
Iuxta poste-
riorē m.

Iuxta priorē

Iuxta priorē
Iuxta poste-
riorem.

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riorem.

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Axi-

Axioma primum Planorum Logarithmicum.

IN triangulis planis rectā-
gulis Logarithmus cru-
ris, cum Logarithmo Radij;
æquatur Logarithmo anguli
dicto cruri oppositi, cum Lo-
garithmo hypotenusæ.

Et idē Logarithmus cru-
ris cum Logarithmo Radij;
æquatur Mesologarith. an-
guli dicto cruri oppositi, cum
Logarithmo reliqui cruris.

Demonstratio.

IN prima fig. supponamus ex.gr. pedem
pro communi laterum trianguli, A B C.
mensura. Erit ergo per priorem partem
Axi. primi linearis, vt, B C, tot pedes, ad,
B C, tanquam Sinum anguli, A, ita, B A, tot
pedes ad, B A, tanquam Radium (in eius
enim priori parte ponitur pro Radio hypo-
tensæ) Vel vt, A C, tot pedes, ad, A C, tan-
quam Sinum anguli, B; ita, B A, tot pedes,
ad, B A, tanquam Radium. Per postero-
rem verò Axiomatis partem erit vt, B C, tot
pedes, ad, B C, tanquam Tangentem angu-
li, A, ita, C A, tot pedes ad, C A, tanquam
Radium (etenim in posteriori parte ponit-
ur pro Radio alterum crurum) Vel vt, A C,
tot pedes, ad, A C, tanquam Tangentem
anguli, B; ita, B C, tot pedes, ad, B C, tan-
quam Radium. Cum ergo quatuor propor-
tionalium numerorum Logarithmi extre-

morum æquantur Logarithmis mediorum;
in prima analogia supradictarum erit Log.
cruris, B C, tot pedum, cum Logar. Radij;
æquale Logarithmo anguli, A oppositi, cum
Logarithmo hypotenusæ, B A. Vel in se-
cunda Log. cruris, A C, tot pedum, cum
Logarithmo Radij; æquabitur Logarithmo
anguli, B, cum Log. hypotenusæ, B A, tot
pedum, per quæ patet prior pars Axiomatis.
Similiter in tertia analogia Logar. cruris,
B C, tot pedum, cum Logarithmo Radij;
æquabitur Mesologarithmo anguli, A, cum
Logarithmo reliqui cruris, C A, tot pedum.
In quarta tandem Logar. cruris, A C, tot
pedum, cum Logarithmo Radij; æquabitur
Mesologarithmo anguli, B, cum Loga-
rithmo reliqui cruris, B C, tot pedum, vn-
de posterioris partis Axiomatis veritas ap-
paret.

Num. 25
prælud.

Corollarium primum.

Idem si dictorum quatuor proportionalium
tria data erunt (hoc est duo ultra Radium)
quartum innotescet, vel per subtractionem
Logarithmi primi dati à Logarithmis secundi,
& tertij dati, qui est secundus modus Prob. 5.
Vel iuxta tertium modum per additionem re-
sidui Logarithmi primi dati cum Logarithmis
secundi, & tertij dati, demendo à facta sum-
ma semper vltimo loco ad sinistram Binarium,
vel Vnitatem cum est in primo loco Radium, sic
igitur ex.gr. si quatuor proportionalia propo-
sita fuerint crur, B C, tot pedes, idem, B C, tan-
quam Sinus anguli, A; B A, tot pedes, &
B A, vt Radium, vt in prima analogia, horum
vero dentur qualibet tria, vt ex.gr. Radium

(qui semper est datus) crur, B C, & Sinus an-
guli, A, ignotum, B A, notificabitur, si ad-
dantur simul iuxta priorem partem Axioma-
tis Log. Radij, cum Logarithmo cruris, B C, qui
sunt noti, & à summa auferatur Log. anguli,
A (vel eisdem addatur Res. Log. A, hoc est,
per Tabellam Prob. 5, Tom. 2 eiusdem anguli,
A, & à summa auferatur Binarium) remane-
bit enim Log. B A, quæsitum. Et sic in care-
tis casibus procedes.

Deniq; prætereundum non est omnes re-
ctangulorum dictos casus per solum Axi-
oma secundum, & tertium lineare, vel Lo-
garithmicum subsequens solui posse.

Axi-

Axioma secundum Planorum Logarithmicum.

IN triangulis planis vni-
uersis Logarithmus cu-
iusvis lateris, cum Logari-
thmo cuiusvis angulorum

eidem adiacentium, æqua-
tur Logarithmo lateris, cum
Logarithmo anguli, prædi-
ctis oppositorum.

Demonstratio.

VT in primæ fig. triangulo, A C B,
Log. cruris, B C, cum Log. anguli re-
cti, C, nempe Radii; æquatur Log. anguli,
A, cum Logarithmo hypotenuse, A B, con-
formiter priori parti Axiomatis primi linea-
ris. Æquantur inquam vel per superius pro-
ximè dicta, vel quia per Axioma secundum
lineare, vt, C B, ad Sinum anguli, A, ita,
A B, ad Sinum anguli, C, recti, etenim hu-
ius Axiomatis demonstratio, etiam rectan-
gulis accommodari potest, vt consideranti
patet. Sic Log. A C, & C, æquatur Log.
B, & B A. Sicut in triangulo obliquangu-
lo, D F E, secundæ figuræ Log. D F, & an-
guli, F, æquantur Log. D E, & anguli, E.

Vel Log. F D, & D, æquantur Log. F E,
& E. Vnde quatuor proportionalium da-
tis tribus, quartum innotescet, & subinde
omnes rectangulorum casus per hoc solum
Axioma secundum siue lineare, siue Loga-
rithmicum soluentur, vt hoc examinati
patet.

Supereft solus casus, quando in rectangu-
lo datis cruribus, vt, A C, C B, in prima fig.
quærimus angulos, A, B, qui, cum detur
quoq; angulus rectus, C, ab illis compre-
hensus, poterit solui per Axioma tertium
lineare, seu per subsequens Logarithmicum
eidem correspondens.

Axioma tertium Planorum Logarithmicum.

Logarithmus summæ cru-
rum, cum Logarithmo
differentiæ infra, vel supra
dimidium summæ angulo-
rum ad basim; æquatur Lo-
garithmo differentiæ crurum,

cum Mesologarithmo semi-
summæ angulorum ab ba-
sim.

Hoc patet quia hæc sunt
proportionalia per Axioma
tertium lineare.

*Num. 25
prælu-
d.*

Corollarium secundum.

EX dictis colligitur in Trigonometria pla-
na, siue per lineas, siue per Logarithmos
operando, dupliciter omnes eiusdem prædictos
casus solui posse. Nempe vel per solum Axi-
ma primum lineare, aut Logarithmicum, om-
nia obliquangula ad rectangula reducendo. Vel
per solum Axioma 2. 3. & 5 nihil inter rectan-

gula, & obliquangula distinguendo. Vtram ve-
lus harum viarum deligere tuum erit studiose
Lector, qui, in memoria subsidium, paucis his
Axiomatibus firmiter seniel apprehensis, faci-
le quoscunque tibi occurrentes casus absolueret
poteris.

PROBLEMA DECIMUMSEXTVM.

*Omnia pro triangulis planis reſtangularis, & obliquangulis
precedentia Problemata tantum per regulam,
& circinum abſoluere.*

Huius Regu-
la, vel Scala
partes poſſunt
ſupponi eſſe
pedes, vel
paſſus, aut
vlna, ſeu de-
cempeda,
aut milliaria
parua &c.
magnis re-
ſpondentia.

23 Primi
Elem.

1. Vt in Pro-
blem. 6.
2. Vt in 7. &
10.
3. Vt in 8.
& 9.
4. Vt in 11.
5. Vt in 13.

Def. prima.
Sexti Elem.

HABEATVR regula, ſeu ſcala, vt,
B O, fig. 16, in quocunq; partes
æquales, vt in 100 diuiſa, quibus
ſint appoſiti numeri ad ſingulas
quinque, vel decem &c. Similiter paretur
quadrans, vt, E A F, fig. 17, in gr. 90 diſtri-
butus: quod fiet ſi circino ad diſtantiã
Radij, A F, aperto, à punctis, E, F, circum-
ferentiam, E F, quadrantis in tres partes
æquales diuiſis; & earum ſingulas in alias
tres deinde harum quolibet in duas, & hæ-
denique ſingulã in quinque ſecentur: tota
enim in partes æquales, ſeu gr. 90 erit di-
ſtributã. Quibus, vt in ſcala, ſui quõq; nu-
meri ad ſingulas quinque, vel 10 &c. appo-
nentur, vt patet in eadem fig. 17.

His paratis, totum ſerè negotium ex hoc
ſolo Problemate pendet. Super datam re-
ctam lineam, & ad datum in ea punctum,
dato cuiusque angulo reſtilineo æquale
angulum conſtituere: eſſique prop. 23 Primi
Elem. quod tali ratione exequemur. Vt ſi
ſit data reſta, D F, in eaque punctum, E, in
fig. 18, ad quod velimus in ea ad partes, F,
angulum graduum 70 conſtituere: circino
aperto ad interuallum, Radij quadrantis,
A F, centro, E, indefinitum arcum, I M, in-
cipiendo à lineã, D F, deſcribemus, per ip-
ſumque capitis ex quadrante, E A F, gr. 70,
nempe arcu, F C, eadem apertura notabi-
mus arcum, I G, & per, G, ab, E, extenden-
tes, E G H, reſtam, conſtituemus angulum,
H E F, graduum 30. Si autem occurreret
conſtituendus obtuſus, ad alteras lineę par-
tes conſtitueremus eius ſuppl. qui eſt acu-
tes, vt pro, H E D, gr. 150 fieret, H E F, gr.
30, & hoc quia quadrans non præbet niſi
angulos acutos.

Conſiderandũ nũc eſt in ſolutione plano-
rũ, ſiue ſint triangula reſtangularia, ſiue obli-
quangula (inter quã hic non diſtinguimus)
quinque tantum data, vt patet ex antece-
dentibus ad ſummum haberi poſſe, nempe.
Primò, tres angulos ſingillatim. Secundò,
duos angulos cum latere vni oppoſito. Ter-
tiò, duo latera cum angulo vni oppoſito, ac
ſpecie reliquo oppoſiti. Quarto, duo late-
ra cum angulo comprehenſo. Quintò, tan-
dem, & vltimò tria latera. Reliqua ergo
in iſdem triangulis ex his datis ſic inqui-
remus.

Primò, datis tribus angulis ſingillatim ali-
cuius trianguli, poſſumus illi ſimile trian-
gulum, etiam ſi ſit ſatis magnum, in aliquo

plano deſcribere ſuper datam quamcunque
reſtam, vt in fig. 19 ſuper, C D, ſi in eadem
conſtituantur per præſcriptum hic Problema
duo anguli ad eius extrema, C, D, duobus
ſuppoſiti triaguli angulis ſingillatim æqua-
les, vt, F C D, F D C, tertius enim, C F D,
tertiò æqualis erit. Circino vero ipſis late-
ribus, C D, C F, F D, ſcalã, B O, fig. 16 ap-
plicatis, innotet ſcet laterum ſuppoſiti trian-
guli proportio, quam per Canonem quoque
didicimus inueſtigare pro reſtangularis in-
Prob. 6.

Secundò, dentur in aliquo triangulo duo
anguli, ex gr. per quadrantem in agro obſer-
uati vnus gr. 30, & alter gr. 110, cum latere
oppoſito ei, qui eſt gr. 110, pedum 70. In
eadem ergo fig. 19 extenſa in plano indefi-
nita reſta lineã, A B, in ea circino ſignabi-
mus, C D, 70 partium ſcalã, B O (quã no-
bis erunt tanquam pedes partui) & ad pun-
ctum, C, faciemus angulum graduum 30:
ſicuti ad, D, angulum gr. 40 duorum dato-
rum ſuppl. & ad concurſum, F, procreabitur
angulus, F, graduum 110. His deſcri-
ptis ſi ſcalã, B O, circino applicentur late-
ra, C F, F D, illicò innotet ſcet, C F, eſſe ſe-
rè p. 48, & F D, p. 37.

Tertiò, ſint data duo latera in aliquo ob-
ſeruato triangulo, vnum p. 50, & aliud p. 20,
cum angulo gr. 20 oppoſito lateri gr. 20, &
cum ſpecie reliquo datorum oppoſiti, qui
ſupponatur acutus: cetera autem inquiran-
tur. Sit ergo in fig. 20 reſta indefinita in
plano extenſa, A B, & in ea circino ſignata,
C D, p. 50, & angulus, C, per arcum, E F,
gr. 20, extenſa indefinitè, C G; capitis verò
ex ſcala, B O, pedibus paruis 20, eadem
apertura poſito vno circini pede in, D, &
alio pede circumducto circuli periphariam
deſcribemus, vt, T H. Hæc verò bis pote-
rit ſecare ipſam, C, G, vt in, T, H, vnde &
duplex triangulum fieri continget, nempe,
C D H, C D T, eorundem laterum p. 50, ac
p. 20 communem angulum, C, habentia,
quorum, C D H, præbet angulum, C H D,
acutum, & C D T, ipſum, C T D, obtu-
ſum (vt propterea ad hanc tollendam am-
biguitatem neceſſe ſit ſpeciem anguli reli-
quo datorum oppoſiti notam habere, vt &
in Prob. 9 dicebatur) Cum ergo nos illum
ſupponamus acutum, triangulum noſtræ
poſitioni congruens erit, C H D, in quo,
C H, per ſcalam, B O, inueniemus eſſe p.
57. Angulos verò, H, D, in quadrante,

18 Sexti
Elem.

32 Primi
Elem.

Hinc deſcri-
bendi præſcrip-
tam Regionẽ
modis elici
poſſeſt.

Quãdo arcus
anguli men-
ſurandi exce-
dit quadran-
tem, vt in

E A F.

Problema decimumsextum. 27

fig. 20 arcus,
P O, applica
quadranti gr.
90, vt, P L,
& deinde ex
cessum supra
quadrantem,
nempe, 10.

E A F, fig. 17 notificabimus, vel utroque,
vel eorum alterum, vt, D, descripto arcu,
P O, ad Radium, A F, quadrantis, E A F,
eoque arcui, E F, ipsius quadrantis per circi-
num applicato: quem inueniemus esse gr.
102, vnde, H, supple. duorum, C, D, erit
gr. 58.

Quartò, dentur in obseruato triangulo
duo latera p. 39, & p. 50, cum angulo com-
prehenso gr. 42, & reliqua quærantur. Sit
ergo in fig. 21 extensa, A B, indchinita, &
in ea ex scala circino signati, C D, p. 50, &
angulus, C, gr. 40, ac in latere, C G, in-
definitè extenso, ipsa, C H, p. 39. Iuncta
enim basi, H D, illa per scalam, B O, inue-
nietur p. 32, & angulus, D (descripto cen-
tro, D, arcu, L M, ad radium quadrantis,
E A F) gr. 51, & subinde, H, duorum no-
torum, C, D, supplementum erit gr. 89.

Quintò, denique, & vltimò dentur in
obseruato triangulo tria latera, vnum p. 50,
aliud p. 39, & reliquum p. 32, & inquiren-
tur anguli. Accipiemus ergo ex scala, B O,
prædictorum pedum numeros, & ex illis
triangulum, H C D, constituemus, vtentes
eadem fig. 21, expanseque circino ad inter-
uallum Radii quadrantis, super punctis, C,
D, arcus, E F, M L, describemus, quibus
quadranti, E A F, applicatis, innotescet an-
gulus, C, esse gr. 40, & D, gr. 51, vnde eor-
um supplementum, H, erit gr. 89.

His ergo omnem casum tam in rectangu-
lis, quam in obliquangulis, licet non tam
accuratè, ac per numeros, expedies: aduer-
tendo quod, si regulæ, B O, partes triangu-
lum, tuum planum excedens, procrearent,
vt cum partes, B O, tibi singulæ pro pedi-
bus habentur, tunc vel dimidium, vel quar-
ta, aut alia pars &c. datorum pedum tibi
sumenda erit. Vt pro p. 80 capiens partes

40, vel 20 &c. quantum singulæ tunc erunt
duorum, siue quatuor pedum &c.

Hæc verò circa Trigonometriam planam
dicta sufficiant: in qua vt vides tam per li-
neas, quam per Logarithmos, & sine his,
per regulam, & circinum operari licebit.
Verum tamen est Logarithmorum vim, &
energiam minus hic, quam in Trigonome-
tria spherica laborem subleuare, tum pro-
pter molestiam, quam continuò affert carac-
teristica Logarithmorum, cui hic solerter
est attendendum, aut residuum Logar. in
Chiliade quærendum, tum etiam propter
difficultatem venandi partem proportiona-
lem in magnis numeris, in hac sola Chilia-
de aliquantulum etiam nonnumquam à ve-
ro aberrantem (facilior enim, ac correctior
euaderet calculus per 10 Chiliades in meo
Directorio positas, & multò magis per cen-
tum Chiliades Briggianas ab Vlacq in Edi-
tione Goudana completas) & tandem cum
in paruis numeris expeditius videatur sine
Logarithmis operari. Propterea, his consi-
deratis, Logarithmorum vsum in Trigono-
metria plana poterit quisq; pro sui libito, &
prout experietur, vel retinere, vel dimitte-
re. At in Trigonometria spherica nusquam
meherclè videatur negligendi Logarithmi,
in ea enim non est caracteristica Logari-
thmorum attendendum, nec residuum Log.
in Chiliade quærendum est, nec adeò dif-
ficilis euadit pars proportionalis, cum ma-
gnis numeris arcus substituantur; sed om-
nia planiora sunt, ac mira facilitate eius-
dem operationes absoluantur, vt vnusquis-
que in sequentibus poterit experiri. Vide
autem si libet in fine Epilogum Regularum
tam pro triangulis planis rectangulis, quam
pro obliquangulis.

Calculus per
Logarithmos
facilior euadit in Trigo-
nometria
spherica, quàm
in plana, &
cur?

Epilogus Re-
gularum Tri-
gonometria
plana.

Finis Trigonometrie Plane.



18 Sexti
Elem.

32 Primi
Elem.

Hinc descri-
bendi propo-
sitam Regionē
modus elici
potest.

22 Primi
Elem.

Quādo arcus
anguli men-
surandi ex-
cit quadran-
tem, vt ix.

TRIGONOMETRIÆ

Linearis, ac Logarithmica

PARS POSTERIOR

De Trigonometria Sphærica.

Definitiones, ac Principia.

Sphæra.

Theodosius
lib. 1.

Centrum,
diameter.

Circuli ma-
ximi, seu ma-
iores, & mi-
nores.

Poli.

Axis.

Triangulum
Sphæricum.

Aduerte pe-
ripharias cir-
culorum in
Sphæra mi-
norum non
concurrere ad
triangulorum
sphæricorum
constitutio-
nem.

Angulus
Sphæricus.

Eius mensu-
ra, seu quan-
titas.
Hinc innote-
scit angulos



SPHÆRA est solidum sub vna superficie contentum, ad quam ab interiori quodam puncto omnes, quæ ducuntur rectæ lineæ inter se sunt æquales. Prædictum verò punctum illius centrum appellatur: & diameter, quæ per centrum transiens, hinc inde ad Sphæra superficiem terminatur.

II. CIRCULI maximi, seu maiores in Sphæra dicuntur, qui transeunt per eiusdem centrum. Hi verò sese bisariam dirimunt, cum se secant in diametro Sphæra. Circuli autem minores vocantur non transeunt per eiusdem centrum.

III. ET si punctum in superficie Sphæra vndiq; à periphæria cuiuscunque in ea circuli distauerit, illius polus dici solet. Et subinde quilibet in ea circulus potest habere duos polos, quos recta iungens vocatur Axis.

IV. TRIANGVLVM sphæricum est, quod in Sphæra superficie à tribus maximorum circulorum arcibus, singulatim semicirculo minoribus comprehenditur. Vt si in fig. 22 sit Sphæra, in eaq; circulus maximus, A I C M; ducanturq; alij circuli maximi quocunque, & qualescunque, quorum medietates sint, A V C, I V M, sese in, V, & cum, A I C M, in punctis, A, I, C, M, utcuq; secantes: orientur in superficie Sphæra triangula Sphærica, A I V, I C V, V C M, V A M, cuiusmodi etiam supponuntur in 3, & 4 figura triangula, G I H, K L M, è Sphæra desumpta: quæ omnia habent latera semicirculo minora.

V. ANGVLVS sphæricus est duorum arcuum circulorum maximorum in superficie Sphæra mutuò se tangentium, & non in eodem plano consistentium alterius ad alterum inclinatio. Hanc verò metitur arcus circuli maximi super puncto angulari tanquam polo, ad quadrantis intervallum descripti. Vt in eadem fig. 22 anguli ex, gr. C V M, non est, C M, mensura, licet eum sub-

rendat (nisi, V C, V M, sint quadrantes) sed debent assumi quadrantes, vt, V E, V F, & arcus, E F, circuli maximi polo, V, intervallo, V F, vel, V E, descripti, erit mensura, seu quantitas anguli, C V M. Hinc ille notus erit, cum, F E, notus erit: eiusq; Si, T a, &c. Log. Mes. log. &c. erit, qui & ipsius, F E. In Sphæricis quoque erunt anguli recti, obtusi, & acuti, & eorum complementa, & supplementa, velut in planis dictum est.

VI. ARCVS enim circuli maximi in Sphæra dicitur arcui circuli maximi perpendicularis, cum facit angulos, qui deinceps sunt, inter se æquales, quorum subinde quilibet dicitur rectus, & eo maior obtusus, ac minor acutus. Quomodocunq; verò cadat vel rectos, vel duobus rectis angulos æquales semper efficit, quod, vt in planis, probatur. Et si in triangulo, ad basim duos obliquos habente, ducatur ad ipsam basim à puncto verticalis anguli perpendicularis arcus, ille cadit intra triangulum, si anguli basi adiacentes sunt ambo vel acuti, vel obtusi; & extra, si vnus est acutus, & alter obtusus. Hoc verò probat Regionmontanus lib. 4. p. 8.

VII. TRIANGVLVM sphæricum est aut rectangulum, nempe quod saltem habet vnum angulum rectum: aut obliquangulum, quod nullum habet angulum rectum. Dantur autem in sphæricis quoq; triangula æquilatera, æquicrura, ac scalena: & in rectangulis crura, & hypotenusa, sicut in obliquangulis crura, basis, & angulus verticalis, vt in planis dictum est, subintelliguntur. In omnibus verò triangulis sphæricis tres eorum anguli simul sumpti superant duos rectos. Et excessus eorum est ad eodem duos rectos, vt quadruplum superficiei trianguli sphærici ad superficiem Sphæra, in quo gignitur ipsum triangulum. Hoc verò elicitur ex quinto Axiomate Sphæricorum, quod ego probavi in meo Directorio P. 3, Cap. 8.

VIII. CVM in triangulis sphæricis tam

sphæricus quoq; gradibus periphæria circulorum maximorum mensurari.

Angulus sphæricus notus.

Eius Si, T a, &c.

Arcus perpendicularis arcui.

Angulus sphæricus rectus, quomaior, obtusus, & minor, acutus, vt in planis, pariter appellatur.

Regula notanda.

Triangulum sphæricum rectangulum, & obliquangulum: æquilaterum, æquicrurum, & scalenum. Crura, hypotenusa, basis, & angulus verticalis, vt in planis.

Proprietas triangulorum sphæricorum insignis.

angu-

Tres Regulae
prodiſtinguē-
da ſpecie an-
guloꝝ, &
laterum in
ſphaericis re-
ctangulis.
Prima Re-
gula.

Secunda Re-
gula.

Tertia Re-
gula.

Triangulum
reſiduum &c.

Triangulum
Vicarium.

Per Num. 5
ſuperiorem.

Per diſta-
Num. 2 ſu-
periori.

Per Num. 6
ſuperiorem.

Quodlibet
triangulum
ſphaericū tria
Vicaria ha-
bere poſſe.

anguli, quam latera quatuor meſſentur:
eorum ſpeciem notam reddere eſt detegere
an ſint maiora, vel minora, vel æqualia
quadranti. Ad hoc autem ſeruiunt tres iſte
Regule pro Triangulis ſphaericis rectangulis.
Prima eſt, quod crura ſequuntur ſpeciem
oppositorum iſtis anguloꝝ, & e contra.
Vt ſi in fig. 22, ductoſ ſemicirculi arcu, B S N D,
ipſi, A S C, perpendiculari, fiat triangulum
rectangulum, V S N, erit crus, S V, quadran-
te minus, ſi angulus illi oppoſitus, S N V, ſit
quadrante minor, & maior, ſi maior. Sic, &
S N, cum angulo, S V N, ſpecie concordabit.
Secunda eſt, quod crura inter ſe, & illi op-
poſiti anguli inter ſe ſpecie concordant, ſi
hypotenusa ſit quadrante minor, ac non
concordant, ſi ſit quadrante maior, & e
contra. Vt ſi, V N, eſt quadrante minor, cru-
ra, V S, S N, inter ſe, & anguli, S V N, S N V,
inter ſe ſpecie concordant: non concordarent
autem, ſi, V N, eſſet quadrante maior, & e contra.
Tertia tandem eſt, quod ſi hypotenusa
eſt quadrans, etiam alterum eorum eſt
quadrans, vel alter anguloꝝ eorum oppo-
ſitorum eſt reſtus: & e conuerſo. Vt ſi,
V N, eſſet quadrans, alteram eorum, V S, S N,
eſſet quadrans: & alter anguloꝝ, S V N,
S N V, reſtus & e conuerſo. Haſt regulas oſen-
dit Regio. lib. 4, p. 3, 4, 5, 6, & 7.

IX. Si duo quacunq; latera, vt in eiuf-
dem fig. 22 triangulo, A S D, crura, A S, A D,
verſus baſim vſq; ad conucluſum, C, conti-
nuentur, fiet triangulum, S C D, quod in
Directorio vocauit triangulum reſiduum ip-
ſius, S A D, ad angulum, S A D. Cum enim
aliquando, S A D, triangulum contigerit eſ-
ſe ineptum ſolutioni, eius loco poterit ſub-
ſtitui, S C D, quod tunc dicitur Vicarium
ipſius, S A D. Eſt enim vtriſque trianguli,
S A D, S C D, communis baſis, S D; anguli
vero, S A D, S C D, ſunt æquales, quia ha-
bent communem meſſuram arcum poſitis,
A, C, ad interuallum quadrantis deſcripti:
A S, eſt ſuppl. S C, & A D, ipſius, D C, ſunt
enim, A S C, A D C, ſemicirculi: & angulus,
A S D, eſt ſuppl. D S C, ſicut, A D S, ſuppl.
S D C, quia, S A D, S D C, vt & A S D, D S C,
ſunt æquales duobus reſtis. Quapropter
nullum erit quaſitum in triangulo, A S D,
quod per ſolutionem eius Vicarij, S C D, ha-
beri non poſſit. Porro triplex Vicarium
trianguli, A S D, assignabile eſt, vnum nempe,
S C D; aliud, A B S, ortum ex continua-
tione baſis, D S, & cruris, D A, verſus reli-
quum crus, A S: tertium tandem eſſet,
quod oriretur ex continuatione baſis, S D, &
cruris, S A, verſus reliquum crus, A D, in re-
liquo hæmiſphærio vſq; ad conucluſum. Pri-
mum ergo adiacet baſi, S D, ſecundum &
tertium adiacet cruribus, A S, A D; & hæc
duo poſtrema habent in ſuis partibus ean-
dem conuenientiam cum triangulo, A S D,
quam eū eodem habere oſenſum eſt, S C D.
Eadem intellige pro quocunque alio, vt,
V A M, cuius Vicaria erunt, V C M, I V A, &
reliquum adiacens lateri, A M, in eadem
ſphaeræ ſuperficie.

X. CVM in exercendis Trigonometriae
ſphaericæ quibuſcunq; Regulis incidetis in
arcum, vel angulum quadrante maiorem,
euius ex Regula præſcripta ſit capienda.
Tan. vel Sec. ſiue Meſol. aut Tom. quæ ex
Num. 16 præluſ. Partis ant. non dantur ar-
cum, vel anguloꝝ ſupra quadrantem
(niſi eſſet ſumenda Ta. 2, vel Sec. 2 &c. quia
tunc ſumenda eſſent pro exceſſu ſupra gr.
90, qui eſt ſemper quadrante minor, vnde
hoc fieri poſſet) tunc certior eris triangulo
tibi ſoluendo Vicarium ſubſtituendum eſ-
ſe. Verum de hoc & eadem Regula te ad-
monebunt, quæ triangulum conditiona-
tum poſtulant. Quod nam verò ex tri-
bus Vicarijs, iam dictis oblatis trianguli ſit
ſubſtituendum ex ſequentibus intelliges.

XI. IN quibuſcunq; triangulis rectan-
gulis ſemper ſubſtitues vel Vicarium adia-
cens hypotenusa, vel adiacens cruri qua-
drante minori. Subſtitues quidem adia-
cens hypotenusa, cum crura erunt ſingilla-
tim quadrante maiora, vel cruribus oppo-
ſiti anguli fuerint obtuſi. Vt pro, A S D, ha-
bente angulum, S A D, reſtum, & crura, A S,
A D, ſingillatim quadrante maiora, vel angu-
los, A S D, A D S, obtuſos, ſubſtituere debe-
res Vicarium, S C D, in quo quinquæ illius par-
tes præter reſtum, S C D, eſſent quadrante
minores, vt ex Num. 9 ſuperiori facile innotuit.
At ſi triangulum ſoluendum eſſet, V A M, cum
angulo reſto, V A M, & crure, V A, quadran-
te minori, & A M, maiori: ſeu cum angulo,
A M V, acuto, & A V M, obtuſo, eſſet ſubſti-
tuendum, I A V, habens idcirco quinq; partes
præter reſtum, quadrante minores.

XII. IN quibuſcunq; obliquangulis
triangulis pariter erit tibi ſubſtituendum
pro Vicario trianguli ſoluendi, vel; quod
adiacet baſi, vel quod adiacet cruri qua-
drante minori, ſeu angulum acutum ſub-
tendenti vno excepto caſu infra dicendo.
Regula enim vel poſtulant in ſoluendo
triangulo conditionem, quod habeat crura
ſeu angulos oppoſitos ſingillatim quadran-
te minora, aut ſaltem minora ſemicirculo:
Vel quod ad minus vnum crurum, vel vnus
anguloꝝ eorum oppoſitorum ſit qua-
drante minus exiſtente angulo verticali acu-
to, ſeu baſi quadrante minori. Si poſtuleris
primum, & ſoluendum triangulum ſit in ea-
dem fig. 22 ex. gr. S A D (quod nunc ſu-
ponatur obliquangulum, vt & V A M) habens
crura, S A, A D, vel angulos, A S D, A D S,
ſingillatim quadrante maiores, Vicarium ſol-
uendum erit, S C D. At ſi ſit, V A M, ha-
bens crura, A V, vel angulum, A M V, qua-
drante minorem, & crura, A M, vel angu-
lum, A V M, quadrante maiorem, Vicarium
erit, A I V, adiacens cruri quadrante minori.
Vt etiam erit cum illa ſimul ſumpta non erunt
ſemicirculo minora, & talia ab ipſa Regula
poſtulantur.

Si verò petatur ſecundum, quatuor caſus
occurrere poterunt. Primus erit cum ex. gr.
propoſitum triangulum, vt, A S D, habuerit
crura, S A, A D, vel angulos, A S D, A D S,

Quādo trian-
gulum Vica-
rium ſit ſolu-
tioni ſubſti-
tuendum.

Duplex ca-
ſus in rectan-
gulis pro Vi-
cario ſubſti-
tuendo.

Duplex con-
ditio, & ſex
caſus in obli-
quangulis pro
Vicario ſub-
ſtituendo.

Duo priores
caſus.

Quatuor po-
ſteriores ca-
ſus.

ſingil-

Definitiones, ac Principia. 31

Quando tri-
gulum Vic-
rium sit solu-
tioni substi-
tuendum.

Casus exci-
piendus.

Duplex cas-
us in rectan-
gulis pro Vi-
cio substi-
tuendo.

Duplex con-
itio, & sex
us in obli-
angulis pro
icario sub-
ituendo.

no priores
sus.

atur po-
iores ca-

singillatim quadrante maiores, circa acu-
tum, S A D, vel cum basi quadrante mini-
ori, & tunc Vicarium erit, S C D. Secundus
erit si habeat eadem singillatim quadrante
maiores, sed circa obtusum, qualis suppona-
tur angulus, S A D, vel cum basi, S D, qua-
drante maiori: & tunc Vicarium erit alte-
rtrum cruribus adiacetium triangulorum,
vt, A S B. Hic vero est casus, vt superius dixi
excipiendus, Vicarium enim adiacet cruri qua-
drante maiori, seu obtusum subtendenti, quod
solum hic contingit. Tertius casus erit si pro-
ponatur triangulum, vt, S C D, cum cruri-
bus, S C, C D, vel angulis, C S D, C D S, sin-
gillatim quadrante minoribus circa obtu-
sum, qualis ponatur, S C D: eritq; pro Vi-
cario substituendum, S C B. Quartus erit
si propositum fuerit ex. gr. triangulum,
V A M, habens crus, V A, vel angulū, V M A,
quadrante minus, & crus, A M, vel angu-
lum, A V M, quadrante maius sed circa ob-

tusum, V A M, seu cum basi quadrante ma-
iori: & tunc erit Vicarium, I A V, adiacens
cruri quadrante minori, seu acutum subtenden-
ti.

Hinc intelligi potest in omnibus triangulis
sphaericis omnem varietatem ad duo capita re-
duci: Vicarium enim erit semper, vel quod
adiacet basi (nempe hypotenuse in rectangu-
lis) vel quod adiacet cruri quadrante minori,
seu acutum subtendenti, excepto dicto casu.
Vnde sciens ex continuatione arcus quadrante
maioris prouenire arcum quadrante minorem,
& ei oppositum angulum obtusum in acutum
commutari, per remanentem facile etiam absq;
respectu ad supra datas Regulas, Vicarium pro
oblato quouis triangulo determinabis.

Ad uberiorem vero dictorum intelligentiam
vide quoque, si tibi libet, in Direc. P. 3, Cap. I
insigniores circulorum in Sphæra superficie se-
cantium, ac Sphaericorum triangulorum pro-
prietates.

Nota.



TRI-

TRIGONOMETRIÆ SPHÆRICÆ

Linearis, & Logarithmicæ.

Axioma primum lineare, Triangulis Sphæricis Rectangulis inserviens.

IN triangulis sphæricis Rectangulis acutum ad hypotenusas eundem habentibus, Sinus crurum dicto acuto oppositorum Sinibus hypotenusarum: Et tangentes eorundem crurum Sinibus reliquorum crurum sunt proportionales.

Declaratio.

Sint in fig. 23 quocunque triacula Rectangula sphærica, C D A, B E A, communem habentia angulum acutum, A, rectis existentibus angulis, A D C, A E B. Dicitur ergo quod ut Sinus cruris, C D, ad Sinum cruris, B E (quæ duo opponuntur acuto, A) ita est Sinus, C A, ad Sinum, A E. Et quod ut Tangens, C D, ad Tangentem, B E, ita est Sinus, D A, ad Sinum, A E. Hoc autem ostenditur in meo Direc. P. 3, Cap. 2, ex quo 16 Regula pro omni Rectangulorum quæ sit tam per lineas, quam per Logarithmos sol-

uendo ibidem deducta sunt, quæ & in Epilogo Regularum in fine addito pariter extensa habentur. Demonstrationes vero in sphæricis mittere decreui, tum quia habentur in meo Direc. vel Compendio, aut Centuria: tum quia hoc Opusculum in maiorem, quam velim, excresceret molem. Quapropter Lectorem pro demonstrationibus ad præfatos meos Libros, seu ad Magazinum in Primo Mobili, aut ad alium quencunque Authorem exsupracitatis in fine Nxm. 25 Prælod. Prioris Partis ablegandum esse duxi.

Cur in Sphæricis demonstrationes prætermittitur.

PROBLEMA PRIMVM.

In triangulis sphæricis rectangulis, datis, ultra angulum rectum, duobus quibuscunque; reliqua patefacere.

In rectangulis 16 ad summa sunt Quæ sita, & hæc habentur in Epilogo &c.



Per Num. 11 superiorem.

SEXDECIM varia Quæ sita ex duobus quibuscunque datis ultra angulum rectum nobis circa triacula sphærica rectangula ad summum contingere possunt, ut consideranti facile innotescet: pro quibus 16 Regulas per lineas, & alias 16 per Logarithmos exercendas (quæ è meo Directorio, ac Compendio excerptæ sunt) habes in Epilogo in fine adiecto. Illis ergo utere, substituto Vicario, cum tibi propositum

triangulum solutioni ineptum est, & omnem in Rectangulis casum absolvere poteris. Vnicum vero Exemplum pro omnibus sufficiet.

Esto in fig. 22 Meridianus, A B C D, Horizon rectus, B S D, Aequator, A S C, qui in S, se secant ad angulos rectos, & Ecliptica, I V M, eorum in quam medietates in hamisphærio orientali, & V, initium Arietis: unde fit triangulum sphæricum rectangulum, V S N, in quo, N S, erit declinatio puncti Eclipticae, N, & S V, eiusdem, seu arcus, V N, sphærici.

Exemplum applicatum sphæricæ, quod fit per primam Regularum Epilogi pro rectangulis sphæricis.

ascen-

ascensio recta, ut patet ex doctrina spherica. Supponamus autem arcum, VN , datum esse gr. 25. 14' Arietis, & quod puncti, M , velimus declinationem indagare, posita maxima Ecliptica declinatione, nempe angulo, SVN , gr. 23. 32'. Hoc vero in terminis purè Trigonometricis (qualiter huc, & reliqua in sequentibus exempla illi capiendæ erunt, qui applicationum fundamenta non intelligunt) non aliud est quam ex data hypotenusa, VN , gr. 25. 14', & ex dato angulo adiacente, NS , gr. 23. 32', inuenire crur, NS , angulo, SVN , oppositum. Hac autem sunt & data, & quaesitum ad primam Epilogi Regulam pertinentia: ergo iuxta eam fac ut Radius ad Sinum anguli dati,

SVN , ita Sinum data hypotenusa, VN , ad Sinum ignoti cruris oppositi, NS , quaesiti: & hoc siue per lineas multiplicando secundum numerum in tertium, & productum per primum diuidendo (qui est primus modus Prob. 5 Trig. plana) siue per Log. conieciendo in unam summam Res. Log. Radij, nempe eiphras, cum Log. secundi, & tertij, & in facta summa delendo unitatem ultimi loci ad sinistram, iuxta monitum Tabellæ Prob. 5 supradicti (qui est tertius eiusdem modus) utraq; enim ratione cum facto Sinu, siue Logarithmo inuenietur, NS , declinatio gr. 9. 48', ut in sequenti calculi forma licet intueri.

	In fix. 22	Per lineas	Per Logarith.
Ut Radius		100000	0
Ad anguli dati, SVN , gr. 23. 32' Sinum		39928	960128
Ita data hypotenusa gr. 25. 14' Sinus		42631	962972
Ad crur, NS , quaesiti gr. 9. 48' Sinus		17022	923100

Porro ex iisdem datis inueniri potest, VS , ascensio recta per Epilogi Regulam secundam, qui immo per has, seu reliquas dictarum 16 Regularum quæcunque Problemata ad Sphaeram rectam pertinentia (qualia sunt tradita à Magistro Libris 5. Trimi, Mo-

bilis) seu quicunque rectorum casus facillimè absoluentur. Delere autem debes semper unitatem ultimo loco ad sinistram iuxta monitum Tabellæ dicti Prob. 5: est enim in vnaquaq; dictarum Regularum in primo loco Radius.

Axioma secundum Sphaericorum lineare pro Rectangulis.

IN triangulis sphaericis rectorum angulis, habentibus crura, seu cruribus oppositos angulos, singillatim quadrante minores, ut Tangens cuiuslibet extremæ vicinæ ad Sinum intermediæ: ita,

Radius ad Tangentem reliquæ extremæ vicinæ.

Et ut Si. 2 cuiuslibet extremæ remotæ ad Sinum intermediæ: ita Radius ad Sinum 2 reliquæ extremæ remotæ.

Vel idem Logarithmicè sic.

Logarithmus intermediæ, cum Logarithmo Radij, aequatur Mesologarithmis extremarum vicinarum: & Logarithmis secundis extremarum remotarum. Quod patet, hæc enim sunt proportionalia

per idem Axioma lineare, unde iuxta dicta Num. 25 prælus. Trig. plana, Logarithmi mesodiorum aquantur Logarithmis extremorum, hoc est &c.

Declaratio.

SI quis multipliciter dictarum Regularum Epilogi auersatus cupiat aliquam Regulam generalem ad soluendum quemlibet casum in triangulis sphericis reſtantiſ Axioma præcedens ſive lineare, ſive Logarithmicum memoriæ commendat: eſt enim Inuentum Neperianum quolibet auro pretioſius, cuius demonstrationem ab eodem Nepero prætermiſſam attuli ipſe in meo Direc. P. 3. Cap. 3. Huius ſi callueris uſum non erit tibi ad præſatas 16 Epilogi Regulas recurrendum, ſed eas Tyronibus renuntiabis. Ad eius uero captum nunc declarandum ſupereſt quænam pars cuiuſq; trianguli ſphærici reſtantiſ dicatur intermedia, & quæ nam extrema vicina, & remota.

Accipiat ergo ex fig. 22 triangulum, V S N, ponaturq; ſecorſim, ut apparet in fig. 24: in quo licet ſint tres anguli, & tria latera, attamen angulus reſtus penitus excluditur, reliquarum uero quinq; partium tres ab ipſo angulo reſto remotiores, nempe duo anguli obliqui, & hypotenufa in ſua complementa ſunt conmutandæ, & retento priſtino ordine omnes quinque in pentagonalen ordinem diſpoſita intelligi debent, ut apparet in ipſa fig. 24, in qua ipſi triangulo, V S N, idcirco circumſcripta fuerunt. Hæ autem ſunt quinque partes trianguli, V S N (qua ratione in cæteris quoq; ſecorſim) quibus applicatur præſatum Axioma, quæcumq; enim ex illis quinq; aſſumpſeris, ut ex. gr. Comp. hypotenufa, V N, cum ipſum habeat ad latera duas partes, nempe Comp. anguli, N, ad dexteram, & Compl. anguli, V, ad ſiniſtram, idcirco Comp. hypotenufa, V N, dicitur intermedia, & Comp. anguli, V, ac Comp. anguli, N, vocantur extrema vicina. Crus uero, V S, & Crus, S N, dicuntur extrema remota reſpectu eiſdem Comp. hypotenufa, V N, intermedia. At ſi ponatur Comp. anguli, N, tanquam intermedia: erunt extrema vicina Comp. hypotenufa, V N, & Crus, S N, & extrema remota Crus, V S (nihil impediens angulo reſto, ſ. hunc ordinem, cum ipſum mente abſtrahamus) & Comp. anguli, V. Quod ſi poneretur Crus, S N, pro intermedia, eſſent extrema vicina Crus, V S, & Comp. anguli, N; & extrema remota Comp. anguli, V, & Comp. hypotenufa, V N. Et ſic ſi poneretur pro intermedia Crus, V S, uel Cõp. anguli, V, ex dictis agnoſcere poſſes quænam ſint extrema vicina, & quæ remota. Maniſeſtum ergo eſt ex Axiomate (aſſumpta ex. gr. pro intermedia Comp. hyp. V N) quod ut Tangens extrema vicina cuiuſvis, uerbi gratia ut Tangens Comp. anguli, V, ad Sinum intermedia, hoc eſt ad Sinum Comp. hyp. V N, ita Radius eſt ad Tang. reliquæ extrema vicina, id eſt ad Tang. Comp. anguli, N: uel per idem Axioma Logarithmi-

cum, quod Logarithmus intermedia, nempe Log. Comp. hyp. V N, cum Log. Radij, æquatur Meſolog. extremarum vicinarum, hoc eſt Meſ. Comp. anguli, V, cum Meſol. Comp. anguli, N. Ergo diſcorum trium datis duobus quibuſvis tertius innoſcet. Nā ſi ex. gr. detur Comp. anguli, V, ac Comp. hyp. V N, & quærat Comp. anguli, N, per Axioma lineare fiet ut Tangens Comp. anguli, V, extrema vicina ad Sinum Comp. hyp. V N, intermedia, ita Radius ad Tang. Comp. anguli, N, hinc notificati. Vel per Axioma Logarithmicum addes inſimul Log. intermedia, hoc eſt Log. Comp. hyp. V N, cum Log. Radij, & à ſumma auferes Meſol. extrema vicina hoc eſt Comp. anguli, V, & remanebit Meſol. reliquæ extrema vicina, ſcilicet Comp. anguli, N, hinc notificati. Et hic eſt ſecundus modus Prob. 5 Trig. planæ, qui in huius Axiomatis exercitio expeditior uidetur: licet poſſes etiam iuxta tertium modum tres Log. ſimul addere, hoc eſt pro Meſ. extrema vicina ſubtrahendo, addere illius Meſ. 2 (iuxta Tabellum eiſdem Prob. 5) nempe addere Meſ. 2 Comp. anguli, V (qui eſt Meſ. eiſdem anguli, V) cum Log. intermedia, ſcilicet cum Log. Comp. hyp. V N, & cum Log. Radij, & (de pta à ſumma Binario ultimo loco ad ſiniſtram) haberetur itidem Meſ. Comp. anguli, N, quæſiti. Non alia ratione ex datis Comp. anguli, N, & Comp. hyp. V N, obtineres Comp. anguli, V, ignoti: ſicut ex datis extremis vicinis Comp. anguli, V, & Comp. anguli, N, notificares Comp. hyp. V N. Licet in hoc caſu Axiomatis linearis analogia prioris partis præpoſte, o ordine eſſet diſponenda, oporteret nempe ſacere ut Radius ad Tangentem Comp. anguli, N, extrema vicina data ita Tangentem Comp. anguli, V, reliquæ extrema remota data, ad Sinum Compl. hyp. V N, intermedia quaſita: & hoc ut in Regula Trium quaſitum ſemper quarto loco reſeruetur. Non diſſimili ratione ſi exercendum eſſet Axioma circa eandem intermediam Comp. hyp. V N, & eius extremas remotas Crus, V S, & Crus, S N, procederetur: ſicut & in reliquis triplicitatibus, quæ obtinere poſſunt pro uarietate intermediarum, & extremarum, quæ conſurgunt, aduertendo cum eſt tumēdus Si. 2, uel Ta. 2, Cõp. anguli, uel hyp. quod ille idem eſt ac Si. uel Ta. eiſdem anguli, uel hyp. Scias autem quod ſi triangulum non eſſet reſtangulum, ſed tamen haberet unum latuſ æquale quadrantī, nihilominuſ illi dictum Axioma adaptaretur, ut offendi in Direc. loco ſupracitato, quod tamen hic omittendum duxi, cum circa reſtangula ſufficere poſſit, & nimis uideatur menſ deſatigari, dum ad tot caſus reſpicere cogitur.

Ut uero Axiomatis uſus clariuſ perceptatur, Exemplum Prob. ant. reaſonatur, in quo ex,

Per priorem partem Axiomatis.

V N.

V N, & angulo, *V*, datis quæstum est *crus*, *S N*, nempe declinatio puncti *N* 3 & propo-
situm sit per hoc Axioma 2 idem *crus*, *S N*,
invenire. Quoniam ergo angulus, *V*, & hyp
V N, commutantur in sua Comp. idco ex datis
Comp. anguli, *V*, & Comp. hyp. *V N*, erit inue-
niendam *crus*, *S N*, quæ tria si considerentur
in ordine pentagonali disposita constituunt unâ
triplicitatem, in qua *Crus*, *S N*, est interme-
dia, & Comp. anguli, *V*, ac Comp. hyp. *V N*,
sunt extrema remota, & hæc sunt datæ, ac qua-
ritur intermedia *Crus*, *S N*. Ergo per analo-
giam posterioris partis Axiomatis præpositæ
accommodatam (ut veniat quartæ loco ipsum
quæstum) fac ut Radius ad *Si*. 2 Comp. an-
guli, *V*, extrema remota (hoc est ad *Si*. angu-
li, *V*) ita *Si*. 2 Comp. hyp. *V N*, reliqua extre-
ma remota (hoc est *Si*. hyp. *V N*) ad Sinum
Cruris, *S N*, intermedia quæsita. Vel per Lo-
gar. adde Ref. Log. Radj cum Log. 2 Comp.
anguli, *V* (hoc est cum Log. *V*) & cum Log. 2
Comp. hyp. *V N* (hoc est cum Logar. *V N*) &
(dempta unitate &c.) fiet Log. *cruris*, *S N*,
intermedia quæsita, unde eveniet eadem
prorsus calculi forma, quæ allata est in Prob.
ant. & propterea eam hic denuò extendere su-

perfluum est.

Quod si ex datis, *N V*, & *V*, vellet, *V S*,
notificare triplicitas esset Comp. hyp. *V N*, &
Crus, *V S*, extrema vicina, & Comp. ang. *V*,
intermedia: unde quæstum haberetur per prio-
rem partem Axiomatis. Et si ex, *S N*, & *V*,
datis vellet, *V S*, notificare: triplicitas esset
Crus, *S N*, extrema vicina, *Crus*, *S V*, inter-
media, & Comp. anguli, *V*, reliqua extrema
vicina, unde haberetur quæstum per priorem
partem Axiomatis præpositæ accommodatam.
Vides ergo considerandam esse triplicitatem,
quæ confurgit ex duobus datis, & quæsita (cõ-
mutatis semper angulis obliquis, & hyp. in sua
Comp.) in dicto ordine pentagonali, discernen-
dumque esse, quæ sit intermedia, & quæ extre-
ma vicina, vel remota: tunc enim scis an prio-
ri, vel posteriori parte Axiomatis, directè, vel
præpositè accepta, ad venandum quæstum
uti debeas. Unde si huius Axiomatis novæ
artificium, in præsenti habebis omnium casuum
in sphericis rethangulis solutionem. At si eni
videretur difficile omittat illud, & Epilogi Re-
gulas prosequatur. Hactenus verò de spheri-
cis rethangulis dictum sit, nunc ad obliquangu-
la transeamus.

*Axioma tertium Sphericorum lineare: ac tam
rethangulis, quam obliquangulis
commune.*

IN triangulis Sphæricis | lorum directè sunt propor-
vniuersis Sinus crurum | tionales.
sinibus oppositorum angu- |

Vel idem Logarithmicè.

Logarithmus cruris cuiuscunque, cum | tur Logarithmo reliqui cruris, & anguli ip-
Logarithmo anguli adiacentis, æqua- | si adiacentis, prædictis oppositorum.

Declaratio.

Sit ergo in fig. 25 triangulum sphericum
quodeunque, *Z S P*, dicitur ergo, ut Si-
nus cruris, *Z S*, ad Sinum anguli, *P*, oppo-
siti: ita esse *Si*. cruris, *Z P*, ad *Si*. anguli, *S*,
oppositi, Vel Log. cruris, *Z S*, cum Logar.

anguli, *S*, æquati Log. cruris, *Z P*, cum Lo-
gar. anguli, *P*, qui opponitur cruri, *Z S*, fi-
cuti crur, *Z P*, opponitur angulo, *S*. Hoc
autem ostenditur in meo Director. P. 3.
Cap. 4.

PROBLEMA SECVNDVM.

In triangulis sphæricis obliquangulis datis duobus cruribus, & angulo vni opposito, nota in super specie anguli reliquo cruri oppositi (cum hic opponitur cruri, quod est propinquius quadranti) reliqua patefacere.

IN eadem fig. 25 intelligatur triangulum, Z S P, factum in superficie primi Mobilis, & in eo, Z, esse zenith, P, polum boreum, & S, Solem: vnde, Z P, erit comp. altitudinis poli; Z S, comp. altitudinis Solis; S P, distantia Solis à polo; angulus, Z P S, hora astronomica, seu tempora horaria & quatoris; angulus, P Z S, azimuthalis Solis distantia à Septentrione; & angulus, Z S P, angulus positionis Solis cum zenith, & polo, seu, quem facit circulus declinationis Solis cum eiusdem circulo altitudinis, ut patet ex doctrina sphærica. Sint ergo data crux, Z P, comp. altitudinis poli gr. 25. 13'; erus, Z S, comp. altitudinis gr. 40. 37', & angulus, S, gr. 32. 18', sit etiam nota species anguli, P, qui supponatur acutus (quia crux, Z S, cui opponitur

proprius est quadranti, quam, Z P, & ideo dubium est an cum eo specie concordet, vel non, cum quo tamen certissime concordaret, si non esset altero crure quadranti propinquius, ut ego ostendi in Direc. P. 3, Cap. 4 ad Regulam septimam generalem in obliquangulis) quique primo inquiratur. Sic ergo per Axioma tertiam Regulam trium instituemus tam per lineas, quam per Logarithmos angulum, P, lora astronomica gr. 54. 44', ut in hac calculi forma videri potest. Et aduerte per Log. positum esse in primo loco Tomolog. 2 graduum 25. 13', addendum cum Log. 972783, & 981358, & à summa Binarium ultimo loco ad finistram prætermisissum fuisse, iuxta Tabellam Prob. 5 Trig. planæ.

Hanc cautionem in Regulis Epilogi omisi, maioris facilitatis gratia; & quia supponere speciem, quæ sit etiam, cum non est necessarium nullum præiudicium asserere potest.

In fig. 25	Per lineas	Per Logarith.
Ut crux datæ, Z P, gr. 25. 13' Sinus	42604	103705
Ad anguli datæ, Z S P, gr. 32. 18 Sinus	53435	972783
Ita crux datæ, Z S, gr. 40. 37 Sinus	65009	981358
Ad anguli quæsitæ, Z P S, gr. 54. 44 Sinus	81649	991196

Nu. 5 præl.

Inuenio, S, si demittatur à Z, vertice trianguli, S Z P, perpendicularis arcus: Z A, super, S P, is caderet intra, ut in, A, quia anguli, S, P, positi sunt acuti. Vnde ex, Z P, & angulo, P, notis inueniemus per Reg. 2 Epilogi pro Sphæricis rectangulis, vel per Axioma secundum arcum, P A, gr. 15. 13'; & per tertium angulum, P Z A, gr. 38. 1'. Similiter ex, Z S, & angulo, S, inueniemus, S A, 35. 55', & S Z A, gr. 64. 22': vnde, S P, aggregatum ex inuentis, P A, A S, hæmpè basis, erit gr. 51. 8', & S Z P, aggregatum ex inuentis, P Z A, A Z S, hæmpè angulus verticalis, erit gr. 102. 23'. Aduerte autem si angulus, P, fuisset suppositus obtusus, quod hæmpè perpendicularum extra triangulum, Z S P,

cecidisset per Numerum 6 præiud. unde basis fuisset non aggregatum, sed differentia inuentorum arcuum; & angulus verticalis, differentia inuentorum angulorum. Vt si fingamus polum esse in, B, triangulumque, Z B S, & angulum, Z B S, obtusum: inuenientur enim, ut supra, arcus, B A, A S, quorum differentia, B S, erit basis quæ sita: necnon anguli, B Z A, S Z A, quorum differentia, S Z B, erit angulus verticalis quæ sita. Recordare autem subistendi trianguli Vicary, cum incidet in triangulum, quem solvere non possis: inuentio enim anguli, P, quæ sit per dictum Axioma tertium libera est, at basis, & angulus verticalis, cum per rectorum leges inquirantur, earundem conditionibus sunt alligata.

Nota.

PRO-

P R O B L E M A T E R T I V M.

*In ijsdem datis duobus angulis, & crure uni eorum opposi-
to, nota insuper specie cruris reliquo datorum oppositi
(cum hoc opponitur angulo, qui est propin-
quior quadranti) reliqua
patefacere.*

IN eadem fig. 25 dentur nunc anguli, vt
supra, S, quidem gr. 32. 18', crur. Z P,
gr. 25. 13. & angulus, P, gr. 54. 44', sit
vero insuper nota species quæsitæ cru-
ris, Z S, quod sit quadrante minus (& hoc
quia opponitur angulo, P, qui est propior
quadranti, quam S) Sic ergo instituimus
Regulam Trium iuxta dictum Axioma ter-
tium per quam itidem inueniemus crur.,
Z S, gr. 40. 37'. Quo habito subinde, P S, &
angulus, P Z S, vt in ant. Prob. factum est
notificabuntur. In sequenti calculo autem
per Log. pro Log. subtrahendo ponitur quo-
que Tomologar. 2 addendus iuxta Prob. 5
Trig. planæ.

<i>In fig. 25.</i>	<i>Per lineas</i>	<i>I</i>	<i>Per Logarith.</i>
<i>Vt anguli dati, S, gr. 32. 18' Sinus</i>	53435	2	1027217
<i>Ad cruris dati, Z P, gr. 25. 13 Sinum</i>	42604	1	962945
<i>Ita anguli dati, P, gr. 54. 44 Sinus</i>	81649	1	991194
<i>Ad, Z S, quæsitæ cruris gr. 40. 37 Sinum</i>	65099	1	981356

*Axioma quartum Sphæricorum
lineare.*

IN triāgulis sphæricis vni-
uersis vt quadratum Ra-
dij est ad rectangulum sub
Sinibus quorumvis crurum;
ita Sinus versus anguli ver-
ticalis est ad differentiam
duorum Sinuum versorum,
quorum vnus est basis, alter
verò differentia crurum.

Declaratio.

IN triangulo, Z P S, figuræ 25 assumantur
pro cruribus quæcunque duo latera, vt,
Z P, P S: dicitur ergo vt quadratum Radij
est ad rectangulum, seu factum sub Sinibus
crurum, Z P, P S: ita Sinum versus anguli
verticalis, Z P S, esse ad differentiam duo-
rum Sinuum versorum, quorum vnus est ba-
sis, Z S, alter verò differentia crurum, Z P,
P S, vt ipsius, B S, si, Z P, P B, ponerentur
æquales. Hoc verò ostenditur à Regiomon-
tano, Magino, pluribusq; alijs, vt & demon-
stratur in meo Directorio P. 3, Cap. 6. Di-
ctus Maginus autem in Primis Mobilis lib. 1
rationes affect eorum, quæ in sequentibus
quinque Corollarijs, e præfato quarto Axio-
mate fluentibus explicantur.

Corol-

cautio-
in Re-
Epilogi
ma-
scilita-
ria; &
ppone-
ciem-
i etiā,
non est
arium
n præ-
um af-
fect.

Corollarium primum.

Colligitur ergo primo in eodem triangulo, ZPS , quod si fiat, ut Radius ad Sinum cruris, ZP , ita Sinus cruris, SP , ad Inuentum primum erit deinde ut Radius ad In-

uentum primum ita Sinus versus anguli verticalis, ZPS , ad differentiam Sinuum versus basis, ZS , & differentie crurum, ZP , PS , quam dicimus Inuentum secundum.

Corollarium secundum.

Colligitur secundo quadratum Radij esse ad rectangulum sub Sinibus duorum angulorum, PSZ , PZS basi, ZS , adiacentium, ut Sinus versus basis, ZS , est ad differentiam duorum Sinuum versorum, quarum unus est

anguli verticalis, ZPS , alius vero est differentia alterutrius angulorum, PSZ , PZS , ut ipsius, PSZ , & supplementi reliqui, PZS . Hoc idem autem, & ipse demonstro in Direct. P. 3. Cap. 6.

Corollarium tertium.

Vnde colligitur tertio, quod si fiat ut Radius ad Sinum alterutrius angulorum, PSZ , PZS , ut ad Sinum, PSZ , ita Sinus reliqui, PZS , ad Inuentum primum. Erit deinde ut Radius ad Inuentum primum, ita Sinus versus basis, ZS , ad differentiam duo-

rum Sinuum versorum, quarum unus erit anguli verticalis, ZPS , alius vero differentia alterutrius angulorum, PSZ , PZS , ut ipsius, PSZ , & supplementi reliqui anguli, PZS , quam dicimus Inuentum secundum.

Corollarium quartum.

Colligitur quarto, quod si fiat & conuerso ut Radius ad Secantem secundam cuiusvis cruris, ut, ZP , ita Secans secunda reliqui cruris, PS , ad Inuentum: erit deinde ut

Radius ad Inuentum, ita differentia Sinuum versorum basis, ZS , & differentie crurum, ZP , PS , ad Sinum versus anguli verticalis, ZPS .

Corollarium quintum.

Colligitur quinto si fiat ut Radius ad Secantem secundam cuiusvis angulorum, basi adiacentium, ut ipsius, PSZ ; ita Secans secunda reliqui anguli, PZS , ad Inuentum: erit deinde ut Radius ad Inuentum, ita differentia duorum Sinuum versorum, quo-

rum unus erit anguli verticalis, ZPS , alter vero differentia alterutrius angulorum, PSZ , PZS , ut ipsius, PSZ , & supplementi reliqui anguli, PZS , ad Sinum versus basis, ZS .

PROBLEMA QVARTVM.

In triangulis sphericis obliquangulis datis cruribus,
cum angulo verticali, basim
inuenire.

HOC Problema præstantissimum est in Geographia, & in Astronomia, per illud enim, datis duarum Ciuitatum longitudinibus, ac latitudinibus facile earum distantia in circulo maximo per eas transeunte inuenitur. Sicuti datis duarum stellarum longitudinibus, & latitudinibus: seu declinationibus, & ascensionibus rectis, pariter earum distantia fit nota. Quemadmodum docent exempla posita in mea Centuria, Probl. 35, & 50. Nunc vero vnicum sufficit Exemplum ad inueniendam distantiam inter Bononiam, & Babylonem, datis earum longitudinibus, & latitudinibus, quod quadrupliciter soluemus. Primò vtentes Corollario primo, Axiomatis quarti, quod est lineare. Secundo idipsum per Logarithmos

exercentes. Tertiò per triangula rectangula. Quarto aliter per Logarithmos. Intelligatur ergo nunc triangulum, ZSP , fig. 25, ita ut, P , sit adhuc polus Mundi boreus, Z , verò Bononiae zenith cuius longitudo est ferè gr. 36. 30', & latitudo ferè gr. 44. 0'; & S , zenith Babylonis, cuius longitudo est ferè gr. 73. 0', & latitudo ferè gr. 35. 0'. Vnde dempta Bononiae longitudine gr. 36. 30' ex longit. Babylonis gr. 73. 0', remanet earum differentia longitudinum, nempe angulus, ZPS , gr. 36. 30'. Similiter, PZ , comp. latitudinis Bononiae erit gr. 46. 0': & PS , comp. latitudinis Babylonis gr. 55. 0', unde differentia crurum, ZP , PS , erit gr. 9. 0'. Inuenienda ergo est basis, ZS , correspondens earundem Ciuitatum distantia in xtra distos quinq; modos,

Primus, & secundus modus per Corollarium primum
supradictorum lineariter, & Logarithmicè
vsurpatum procedens.

Primo ergo, & secundo modo duplicem institue Regulam Trium, vt vides in inferiori calculi forma. Nempe fac vt Radius ad Sinum cruris, ZP , ita Sinus cruris, PS , ad Inuentum primum, & hoc tam per lineas, quam per Log. more solito. Deinde fac vt Radius ad Inuentum primum, ita Sinus versum anguli verticalis (quem Sinus versum didicisti inuenire in Probl. primo Trig. planæ) ad Inuentum secundum pariter tam per lineas, quam per Log. Porro Log 966286 dabit tibi Inuentum secundum 11558 (quod est differentia duorum Sinuum versorum, quorum vnus est basis, alter differentia crurum, vt inquit Corollarium primum) siue illum quæras inter Logarithmos Canonis, numerus enim 11558 tibi offeretur e regione in columna Sinuum, Cadhibuata tamen patris proportionali &c.) siue illum inquiras inter Logar. Chiliadis, mutata Caræ. 9. in 2 iuxta P ob. 4. immedie enim capies ex Tabula numerum 115, & deinde per partem proportionalem relias quoq; notas, & subinde totum numerum 11558 etiam hoc modo poteris obtine-

re. Deniq; differentia crurum, ZP , PS , quæ est gr. 9. 0' inuenies Sinum versum, vt didicisti in dicto Probl. primo, Trig. planæ, quem addes Inuento secundo nempe ipsi 11558, & fiat 12789 Sinus versus graduum 29. 18', basis, ZS , quæ sita. Intellexisti nam quomodo dati Sinus versi inueniatur arcus ex Probl. secundo, Trig. planæ. Distantia ergo inter zenith Bononiae, & Babylonis, & consequenter inter vtrasq; Ciuitates in circulo maximo per eas transeunte erit gr. 29. 18', & si cuilibet minuto tribueris vnum milliariæ Italicum, idest si ipsos gr. 29. 18' multiplicaueris per 60, prodibunt milliaria 1758 inter Bononiam, & Babylonem. Hoc verò Corollarium eodem modo vsurpabitur qualiscunque sit angulus verticalis, & qualescunque sint crura, nulla enim casuum obfermatione indiget.

Babylonis longitudo gr. 73. 0'. Latitudo gr. 35. 0'. Comp. gr. 55. 0'. Bononiae longitudo gr. 36. 30'. latitudo gr. 44. 0'. Comp. gr. 46. 0'. Differentia long. angulus, ZPS , gr. 36. 30'. Differ. lat. seu, SP , ZE , gr. 9. 0'.

Recordare, præmittendum esse unitatem in summa, cum sint Logarithmorum additiones, propter Ref. Log. Radij, iuxta motum Tabellæ. Prob. 5 Trig. planæ.

In fig. 25.	Per lineas	Per Logarith.
Vt Radius	100000	0
Ad dati cruris, Z P, gr. 46. 0' Sinus	71934	985693
Ira dati cruris, P S, gr. 55. 0 Sinus	81015	991336
Ad Inuentum primum	58925	977029
Deinde		
Vt Radius	100000	0
Ad Inuentum primum	58925	977029
Ira anguli dati verticalis, Z P S, gr. 36. 30 Sin. ver.	19614	929257
Ad Inuentum secundum	11558	906286
Differentia crurum, Z P, P S, gr. 9. 0 Sin. versus	1231	
Basis, Z S, distantia quaesita inter Bonon. & Babyl.	12789	
gr. 29. 18 Sin. ver.		

*Tertius modus per reductionem ad triangula
rectangula.*

DEmisso ab alterutro extremorum, Z, S, datorum crurum, vt à, Z, super, P S, reliquum crus perpendiculari arcu, Z A: ex datis hypotenusa, Z P, & angulo, P, in triangulo rectangulo, Z P A, per primam, & secundam Regularum Epilogi pro Sphaericis rectangulis, siue linearem, siue Logarithmicam, inuenies, P A, gr. 39. 46', & Z A, gr. 25. 20'. Deinde conferes Inuentum, P A, cum, P S, demendo minorem ex maiori (cum enim fuerit, P A, arcus inuentus, minor crure, P S, perpendicularum cadet intra triangulum, vt nunc contingit; & si esset eo maior, caderet extra) & relinquetur, A S, gr. 15. 14'. Tandem in triangulo rectangulo, Z A S, ex datis cruribus, Z A, gr. 25. 20', & A S, gr. 15. 14' per 13. supradictarum Regularum inuenietur basis, Z S, gr. 29. 18', vt supra.

Hoc ostenditur in Direc.

Posses etiam, inuento tantum, P A, & A S, facere vt Si. 2, P A, ad Si. 2, A S, ita Si. 2, Z P, ad Si. 2, Z S, hinc notificatam. Hoc est passus prius inuenire, P A, per secundam supra-

dictarum Regularum iungendo Tomolog. anguli verticalis, Z P S, cum Mes. 2 cruris, Z P, fieret enim (dempta unitate &c.) summa, quae esset Mes. 2 arcus, A P: & per eius subtractionem, tanquam minoris, à, P S, habito, A S, si simul iungeres Tomolog. ipsius, P A (pro Log. 2 eiusdem, qui esset subtrahendus, & hoc iuxta Tabellam Prob. 5. Tric. plana) cum Log. 2, A S, & cum Log. 2, Z P, fieret summa, quae (dempto Binario &c.) esset Log. 2 ipsius, Z S, cuius speciem scires ex eruditione, Z A, A S, si enim in specie concordarent esset, Z S, quadrante minor, & si non, esset quadrante maior, per Conuersum Reg. secundae Num. 8. pralud. Ipsius vero, Z A, speciem agnoscat ex angulo verticali, Z P S, cum quo specie concordabit per Reg. primam dicti Num. 8. pralud. Recordare tamen trianguli Vicarij substituendi, cum incidit in triangulum rectangulum, quod solui non possit. Vide nunc calculi formam iuxta proxime dicta, quae procedit per Log. licet etià per lineas iuxta dicta intelligatur quomodo fieri possit.

P. 3, Cap. 5, lem. primo.

In nostro exemplo, Z S, est quadrante minor, quia, Z S, A S, in specie concordant, sunt singillatim quadrante minores.

In fig. 25.	Per Logarithmos.
Anguli verticalis, X P S, gr. 36. 30	1009482
Cruris minoris, Z P, 46. 0	998484
Inuentum primum, A P, subtr. 39. 46	1007966
Crus maius, P S, 55. 0	1011427
Inuenti secundi, A S, 15. 14	998447
Basis, Z S, distantia quaesita inter Bonon. & Babyl. 29. 19	994051

Quar-

Problema quartum.

41

Quartus modus aliter per Log. procedens, dummodo crura sint singillatim quadrante minora.

Primo conijce in vnam summam duos Log. semianguli verticalis, & Logarithmos crurum, cum Tomolog. differentia eorundem crurum, & fiet (relicta ultimo loco ad sinistram in facta summa tantum) unitate, ac reliquis unitatibus, quæ ibidem scribenda forent, prætermisiss) summa, cuius dimidio tanquam Logarithmo respondens arcus semper quadrante minor, duplatus erit.

Secundo huius dupli arcus Logarithmum secundum iunges cum Log. 2 dictæ differentia crurum, & fiet Log. 2 arcus, qui erit quasi basis, cum arcus duplus erit quadrante minor. Cum vero ille fuerit quadrante maior, basis erit inuenti arcus supplementum. Effetq; quadrans, si ille esset quadrans. Basis inquam sequitur arcus dupli speciem, quem ideo tati assertum notabimus.

Huius autem Regula ratio habetur in mea Centuria Prob. 36, ubi quoq; exemplificatur. Aduerte tamen ibi sumi Ref. Log. 2 differen-

tia crurum, quia in Tabella Centuriæ adiecta non habetur Tomolog. qui seruiant pro Ref. Logar. 2, sicuti Tomolog. secundi seruiant pro Ref. Log. eorundem arcuum, vel angulorum, ut ex dictis ad finem Prob. 5 Trig. plana colligi potest. Hic vero pro dicto Ref. Log. 2 differentia crurum summus idcirco Tomologar. eiusdem. Hinc si quis voluerit se exercere in Problematis Centuriæ, vel in Regulis Compendijs, aut Praxis Astrologica pro Directionibus, poterit vbiq; præcipitur alicuius arcus, vel anguli sumendum esse Ref. Log. sumere eiusdem Tomolog., & pro Ref. Log. sumere Tomolog. 2, & tunc in facta summa non vnitas, sed duas prætermittere unitates opus erit, iuxta monitum Tabellæ Prob. 5 Trig. plana. Vide nunc calculi formam, in qua duplex, ll, significat illam summam, cui præfigitur, æquivalere duobus Logarithmis, nempe dimidianam esse, ut habeatur simplex Logar. ad huius ergo imitationem quacumq; alia Exempla facere poteris.

Nota pro Ref. Log. 2 adhibito in Centuriæ, ubi sub. firui Tomolog. & pro Ref. Logar. Tomolog. 2.

In fig. 25.

Per Logarith.

Semianguli verticalis, Z P S,	gr. 18.15	l	949577
Idem Logarithmus		l	949577
Cruris maioris, S P,	55. 0	l	991336
Cruris minoris, P Z,	46. 0	l	985693
Differentia crurum, S P, P Z,	9. 0	t	1000538
Dimidia hanc summam		ll	1876721
Arcus respondentis semper quadrante minoris	14. 0	l	938360
Arcus dupli	28. 0	l 2	994593
Differentia crurum, S P, P Z,	9. 0	l 2	999462
Basis, Z S, distantia quæ sita inter Bon. & Bab.	29.18	l 2	994055

PROBLEMA QVINTVM.

In triangulis sphericis obliquangulis, datis cruribus, cum angulo verticali, reliquos angulos inuenire.

Primus modus per triangula rectangula.

IN eodem triangulo, Z S P, figuræ 25 dentur eadem, quæ in Prob. ant. quaratur autem alteruter angulorum, Z, S, vt, S. Demisso ergo à, Z, extremo cruris quæ situm angulum subrendentis perpendiculari, Z A: ex, Z P, &, P, inuenimus, vt supra ipsium, P A, gr. 39.46, & Z A,

gr. 25. 20. Deinde conferemus inuentum, P A, cum, P S (si enim, P A, minor est, quam, P S, perpendiculū cadit intra triangulum, Z P S, & si est maior, cadit extra.) demproq; minori ex maiore, relinquetur, A S, gr. 15. 14. Quæ omnia habes iam in tertio modo Problematis ant. Deniq; in

F

trian

Cap. 5, primo.

ro ex-
S, est
int
quia,
S, in
concor-
sunt
stim
ute
s.

triangulo, ZAS, rectangulo ex crutibus datis, ZA, gr. 25. 20', & AS, gr. 15. 14' inuenies angulum, S, cruti, ZA, oppositum gr. 60. 58' per Regulam 14 sphaericorum rectangulorum Epilogi. Cum tamen perpendicularum cadit extra triangulum, angulus quaesitus erit inuenti anguli supplementum.

Posses etiam, inuento tantum, PA, & AS, facere per Lem. 5 Cap. 5 Patris mei Direc. ut Sinus, PA, ad Sinum, AS, ita Tangentem 2 anguli verticalis, P, ad Tangentem 2 anguli, S. Hoc est per Log. conicere in unam summam Tomolog. 2, PA (pro Log. PA, qui est subtrahendus) cum Log. AS, & cum Mesol. 2 anguli verticalis, P (subintellige cum Mesol. excessus eiusdem supra quadrantem, cum est quadrante maior) & fiet summa (dempto Binario &c.) Mesol. 2 anguli, S, quaesiti, cum perpendicularum cadit intra, ut nunc. Cum enim cadit extra angulus quaesitus est inuenti anguli suppl. ut supra dictum est. Vide autem hic integram calculi formam, in qua inuenitur pariter angulus, S, gr. 60. 58', qui est angulus positionis Bononiae, Z, respectu Babylonis, S.

mam Tomolog. 2, PA (pro Log. PA, qui est subtrahendus) cum Log. AS, & cum Mesol. 2 anguli verticalis, P (subintellige cum Mesol. excessus eiusdem supra quadrantem, cum est quadrante maior) & fiet summa (dempto Binario &c.) Mesol. 2 anguli, S, quaesiti, cum perpendicularum cadit intra, ut nunc. Cum enim cadit extra angulus quaesitus est inuenti anguli suppl. ut supra dictum est. Vide autem hic integram calculi formam, in qua inuenitur pariter angulus, S, gr. 60. 58', qui est angulus positionis Bononiae, Z, respectu Babylonis, S.

In fig. 25.

Per Logarithmos.

Anguli verticalis, ZPS,	gr. 36. 30	t	1009482	m 2	1013079
Crutis minoris, ZP,	46. 0	m 2	998484		
Inuentum primum, AP, subtr.	39. 46	m 2	1007966	t 2	1019405
Crus maius, PS,	55. 0			l	941954
Inuenti secundus, AS,	15. 14				
Anguli, S, quaesiti, positionis Bonon. ad Babyl.	60. 58			m 2	974438

Secundus modus aliter per Logarith. procedens, supponens tamen crura insimul semicirculo minor, quo utriq; anguli ad basim uno actu inveniuntur.

Primò Tomolog. semisumma crurum iunge cum Log. 2 semidifferentiae eorum, & cum Mesol. 2 semianguli verticalis, & fiet (dempto Binario &c.) Mesol. semisummae angulorum ad basim.

Secundò Tomolog. 2 semisummae crurum iunge cum Logar. semidifferentiae eorum, & cum Mesol. 2 semianguli verticalis, & fiet (dempto Binario &c.) Mesol. semidifferentiae angulorum ad basim.

Tertio adde semidifferentiam semisummae, & fiet angulus maior: deme, & fiet minor.

Huius Regula ratio pendet ex conuerso prop. illius famose Neperianae, quā ostendi ego in meo Compendio, Censurae Problematum adiecto, pag. 114 (in qua tamen pag. 116 linea 8 dele haec verba: che si supponga hora rettangolo

in, F) ut enim in eius Cor. 2 deduxi, manifestum est quod, ut Sinus 2 semiangulorum est ad Si 2 semidifferentia eorum: ita Tangentem 2 semianguli verticalis est ad Tangentem semisummae angulorum ad basim. Et ut Sinus eiusdem semiangulorum ad Sinum eorum semidifferentia: ita Tangentem 2 semianguli verticalis est ad Tangentem semisummae angulorum ad basim: qua addita semisumma dat angulum maiorem, & dempta, dat minorem. Hanc vero posui in Epilogo ut tam per lineas, quam per Logarithmos, ut nunc exemplificabitur, possumus operari. Vide ergo calculi formam eadem superius data supponentis, in qua angulus maior, Z, inuenitur gr. 95. 15, & minor, S, gr. 60. 58', serò ut supra quoq; inuentus fuit.

eminentissimas recensetur, quam & Briggs praestantissimam diiudicauit, quamque publici iuris effecit Robertus Neperi discipulus, & ego demonstravi in meo Compendio pag. 114.

In fig. 25.

Crus maior, S P,	gr. 55. 0
Crus minor, Z P,	46. 0
Summa eorundem	101. 0
Differentia	9. 0
Semifumma	50.30
Semidifferentia	4.30
Semianguli verticalis, Z P S,	18.15
Semifumma angulorum, Z, S,	78. 7
Semidifferentia eorundem, Z, S,	17. 8
Angulus maior, Z,	95.15
Angulus minor, S,	60.59

Adde, &
deme.

Per Logarithmos.

t	1019649	12	1011259
l 2	999866	l	889464
m 2	1048181	m 2	1048181
m	1067696	m	948904

P R O B L E M A S E X T V M .

In triangulis sphericis obliquangulis, data basi, cum duobus angulis adiacentibus, angulum verticalem notum facere.

SINT in fig. 26, Z, S, due stellæ, & P, polus, sitq; nota earum distantia, Z S, in circulo maximo per eas transeunte, quæ sit gr. 64.59, basis trianguli sphericæ obliquanguli, Z S P: sit insuper notus angulus, Z S P, gr. 21.40, & S Z P, gr. 122.48: & ex his datis queratur angulus ad polum, nempe angulus verticalis, Z P S, qui metitur differentiam ascensionum rectarum eorundem stellarum. Hunc ergo quadruplici modo inquiremus, conformiter quatuor modis, quibus in Prob.4 vti sumus.

Primus, & secundus modus per Corollarium tertium Axiomatis quarti, lineariter, & Logarithmicè usurpatum.

Primò fac vt Radius ad anguli, S Z P, gr. 122.48, vel eius supplementi gr. 57.12 Sinum: ita anguli, S, gr. 21.40 Sinum, ad Inuentum primum.

Secundò fac vt Radius ad Inuentum primum, ita basis, Z S, Sinum versum, ad Inuentum secundum. Et hoc vel lineariter, vt docet dictum Coroll. tertium, vel Logarithmicè, vt apparet in sequenti calculi forma.

Tertiò differentia anguli, S, gr. 21.40, & supplementi anguli, S Z P, gr. 57.12, quæ est gr. 35.32 Sinum versum adde Inuento secundo, & proueniet Si. versus anguli verticalis, Z P S, quem inuenies gr. 50.36. Recordare autem unitatis prætermittendæ in duabus additionibus Logarithmicarum, propter additionem Ref. Log. Radij, vt monet Tabella Prob.5 Trig. planæ.

In fig. 26.		Per lineas [-]	Per Logarith.
<i>Vt Radius</i>		100000	r l
<i>Ad anguli, S Z P, gr. 122. 48', seu eius supplementi gr. 57. 12'. Sinus</i>		84057	l
<i>Ita anguli, S, gr. 21. 40' Sinus</i>		36921	l
<i>Ad Inuentum primum</i>		31035	l
Deinde.			
<i>Vt Radius</i>		100000	r l
<i>Ad Inuentum primum</i>		31035	l
<i>Ita basis, Z S, gr. 64. 59' Sinus versus</i>		57712	u
<i>Ad Inuentum secundum</i>		17911	l
<i>Differentia anguli, S, & suppl. S Z P, gr. 55. 32' Sinus versus</i>		18622	
<i>Anguli verticalis quaesiti, Z P S, gr. 50. 36' Sinus versus</i>		36533	

Adde.

Tertius modus per reductionem ad triangula rectangula.

DEmisso ab alterutro angulorum, P S Z, P Z S, puncto, S, Z, vt a, Z, perpendiculari, Z A, primo ex hypotenusa, Z S, gr. 64. 59', & angulo adiacente, S, gr. 21. 40', inuenimus in triangulo rectangulo, Z A S, eius oppositum angulo, seu perpendiculari, Z A, gr. 39. 33' per primam Regularum Epilogi pro sphaericis rectangulis. Secundo ex eorum, Z A, gr. 39. 33', & angulo, S, illi opposito gr. 21. 40' (qui in specie concordant iuxta Reg. primam Nu. 3 praclud.) ac specie anguli, S Z A (quam non ignoras, nam cum sit hyp. Z S, quadrante minor anguli, S Z, in specie concordare debent per Regulam secundam disti Num. 8 praclud. sicuti si esset quad. maior, minime concordarent) inuenies per Reg. 12 ipsum angulum, S Z A, gr. 80. 28', qui cum sit minor angulo, S Z P, qui est gr. 122. 48', ostendit perpendiculari, Z A, cadere intra triangulum, S Z P. Dempto ergo, S Z A, ex, S Z P, remanebit, A Z P, gr. 42. 20'. Denique ex, Z A, gr. 39. 33', & angulo, A Z P, gr. 42. 20' inuenies angulum verticalem quaesitum, Z P A, gr. 50. 36'. Quod si perpendiculari, Z A, caderet extra (vt contingeret si propositum triangulum esset ex-

gr. Z S B) tunc vltimo inuentus angulus esset, Z B A, sed verticalis quaesitus esset illius suppl. nempe, Z B S.

Posses etiam compendiosius procedere, si primo in triangulo rectangulo, Z S A, ex hyp. Z S, & angulo adiacente, S, inuenires per tertiam Regulam Epilogi pro sphaericis rectangulis reliquum angulum, S Z A, gr. 80. 28'. Secundo, vt supra, ipsum demeres ex, S Z P (vel e contra, si esset inuentus angulus maior, S Z P, hunc ex illo subtraheres) relinqueretur enim, A Z P. Tertio tandem quoniam per Lemma secundum, Cap. 5, P. 3. Directiorij Sinus anguli, S Z A, ad Sinum, A Z P, est vt Sinus 2 anguli, Z S A, ad Sin. 2 anguli, Z P A: ideo si simul adderes hos tres Log. nempe Tomolog. 2 anguli, S Z A (pro eius Log. qui esset subtrahendus iuxta Tabellam Probl. 5 Trig. plana) cura Log. A Z P, & cum Log. 2, Z S A, fieret (dempto Binario &c.) Log. 2 ipsius, Z P A (vel ipsius, Z B A, pro triangulo, Z S B) qui cum perpendiculari, Z A, & subinde cum angulo, S, specie concordaret. Inuenies ergo ipsum, Z P A, gr. 50. 36. vt patet in sequenti calculi forma. Ne obliuiscaris autem trianguli Vicarij substituendi, cum incideris in triangulum rectangulum, quod solui non possit.

In fig. 26.		Per Logarithmos.	
<i>Hyp. data, Z S,</i>	gr. 64. 59	l 2	962622
<i>Anguli, Z S A, dati</i>	21. 40	m	959909
<i>Anguli, S Z A, Inuenti primi subtr.</i>	80. 28	m 2	922531
<i>Reliquus, S Z P,</i>	122. 48		
<i>Ang. A Z P, Inuenti secund.</i>	42. 20		l
<i>Ang. Z P A, verticalis quaesiti</i>	50. 36		l 2

Quar-

Quartus modus aliter per Logarith. procedens, dummodo anguli basi adiacentes sint acuti.

Primo conijce in vnam summam duos Log. 2 semibasis, cum Log. datorum eorundem angulorum, & exibat (relicta ultimo loco ad finistram tantum vhitate) summa, cuius dimidio tãquam Logarithmo respondens arcus, semper quadrante minor, duplandus erit.

Secundo huius dupli arcus Logar. 2 iunges cum Log. 2 differentia eorundem angulorum, & fiet (dempta vnitatē &c.) Logarith. 2 anguli, qui erit angulus verticalis quæsitus, cum arcus duplus erit quadrante maior. Cum verò ille erit quadrante minor, tunc suppl. inuenti anguli erit angulus verticalis quæsitus. Angulus inquam verticalis specie contrariabitur semper arcui duplo, cui ideo præfigimus asteriscum*.

Hac eadem Regula, eius consorti, quæ tradita est ad quartum modum Prob. 4, probatur per Prob. 36 in eâ Centuria. Quoniam verò postulat duos datos angulos acutos, hic verò, S Z P, est obtusus, ideo Vicarium solutionis substituendum est, quod adiacet cruri, Z P, acutum, S, respicienti iuxta Num. 12 præclud. Ergo continuatis arcibus, S Z, S P, usq; ad concursum in C, oriatur triangulum sphericum obliquangulum, C Z P, Vicarium ipsius, Z S P, pro eo nobis soluendum, in quo erit basis, Z C, suppl. S Z, gr. 115. 1, & ei adiacentes anguli dati erunt, & acuti, nempe, C, æqualis ipsi, S, gr. 21. 40, & P, Z C, suppl. ipsius, P Z S, gr. 57. 12, ex quibus venabimur per suprapositam Regulam angulum verticalem, Z P C, quem inueniemus gr. 129. 24, cuius suppl. Z P S, erit idcirco gr. 50. 36, angulus verticalis quæsitus, ut patet in sequenti calculi forma.

In fig. 26.

Per Logarith.

Semibasis, Z C,	gr. 57.30 $\frac{1}{2}$	l 2	973012
Idem Log. 2		l 2	973012
Anguli maioris, P Z C,	57.12	l	992457
Anguli minoris, Z C P,	21.40	l	956727
Differentia eorundem	35.32	l	1008949
Dimidia hanc summam		ll	1904157
Arcus respondentis semper quadrante minoris	19.22 $\frac{1}{2}$	l	952078
Arcus dupli	38.45	l 2	989203
Differentia angulorum datorum	35.32	l 2	991051
Anguli inuenti	50.36	l 2	580254
Eius suppl. Z P C,	129.24		
Vnde, Z P S, quæsitus ang. verticalis est	50.36		

*

PROBLEMA SEPTIMUM.

In triangulis sphericis obliquangulis, data base, cum duobus angulis eidem adjacentibus; utrumvis crurum inuenire.

Primus modus per triangula rectangula.

IN eodem triangulo, ZSP , fig. 26 den-
tut eadem, quæ in Prob. ant. quærat
autem alterutrum crurum, ZP , PS , vt,
 ZP . Demisso e go à puncto, Z , angu-
li quæsito cruri adjacentis perpendiculari,
 ZA , primo in triangulo, ZSA , ex data
hyp. ZS , gr. 64. 59, & angulo adiacente,
 ZSP , gr. 21. 40, inueniemus vt in Probl.
ant. crur. ZA , gr. 19. 33, & angulum reli-
quum, SZA , gr. 80. 28. Deinde collato,
 SZA , cum dato angulo, SZP , minorem
ex maiore subtrahemus (cader enim per-
pendicularum intra triangulum, ZSP , cum,
 SZA , fuerit minor, quam, SZP ; & extra,
cum erit maior) nempe in nostro casu au-
feremus, SZA , gr. 80. 28 ex, SZP , gr. 122.
48, restabitque, AZP , gr. 42. 20. Tan-
dem ex crure, AZ , gr. 19. 33, & angulo
adiacente, AZP , gr. 42. 20, per 9 Regula-
rum Rectangulorum Epilogi, inueniemus
in triangulo rectangulo, ZAP , hypot. ZP
(quæ est crur. in triangulo obliquangulo,
 ZSP) gr. 25. 39, quæsitam.

Posses etiam compendiosius, vt in Prob. ant.
en, ZS , & S , inuenire, SZA , & per sub-
tractionem eius ab, SZP , ipsum, AZP , De-

inde per Lemma 4 Cap. 5 P. 3 Direc. posses fa-
cere vt Sinus 2 anguli, SZA , gr. 80. 28, ad
Sinum 2 anguli, AZP , gr. 42. 20: ita Ta 2
basis, ZS , ad Ta 2, ZP ; nempe Logarithmi-
ce posses addere simul hos tres Log. scilicet To-
molog. anguli, SZA (pro eius Log. 2, qui es-
set subtrahendus) cum Log. 2 anguli, AZP ,
& cum Mes. 2 basis, ZS : fieret enim (demon-
stro Binario &c.) Mes. 2 arcus, qui esset ipse,
 ZP , si anguli, AZP , APZ , essent eiusdem
speciei (est enim hypot. ZP , in triangulo re-
ctangulo, ZAP , quæd. minor, cum anguli
obliqui specie concordant, & quæd. maior, cum
non concordant, per conuersu Reg. secundæ, ex
Nu. 8. pralud.) vel eius suppl. cum fuerint di-
uerse speciei. Porro specie ipsius, ZPA (vel,
 ZBA , si esset propositum triangulum, ZBS)
eadem est cum specie anguli dati, S : & ideo
angulo, AZP , cum, S , specie concordant, &
collectus arcus erit ipse, ZP , & non concordant-
re, erit, ZP , collecti arcus supplementum.
Vide nunc totius calculi formam, in qua cum
Mes. 2: 1031867 colligitur arcus gr. 25. 39, ne-
pe ipsummet crur. ZP , est gr. 25. 39, scilicet
quæd. minus, cum anguli, AZP , ZSA , sint
ambo acuti.

Per Regulam
notandam
Nu. 6 pralu-
dialis.

In fig. 26.

Per Logarithmos.

Hyp. data, ZS ,	gr. 64. 59	l 2	962622	m 2	966900
Anguli, ZSA , dati	21. 40	m	959909		
Anguli, SZA , subtr.	80. 28	m 2	922531	r	1078088
Reliquus, SZP ,	122. 48			l 2	986879
Angulus, AZP ,	42. 20				
Crur. quæsitum, ZP ,	25. 39			m 2	1031867

Secun-

*Secundus modus aliter per Logar. procedens, supponens
tamen datos angulos insimul duobus rectis mi-
nores; quo utraq; crura vno actu
inveniuntur.*

Primò Tomolog. semisummæ datorum
angulorum iunge cum Logar. 2 semi-
differentiæ eorundem, & cum Mes. semi-
bafis: & fiet (dempto Binario &c.) Mes.
semisummæ crurum.

Secundò Tomolog. 2 semisummæ dato-
rum angulorum iunge cum Log. eorundem
semidifferentiæ. & cum Mes. semibafis: &
fiet (dempto Binario &c.) Mes. semidif-
ferentiæ crurum.

Tertiò adde crurum semidifferentiam
inuentam ipsi semisummæ, & fiet crus ma-
ius; deme, & fiet crus minus.

Hac Regula directè probatur ex Prop. Ne-
periana, superius citata in Prob. 5, in ea enim
ostendi, quod ut Sinus 2 semisummæ angulo-

rum ad basim dati trianguli obliquanguli, est
ad Sin. 2 semidifferentiæ eorundem angulo-
rum: ita Tangens semibafis, est ad Tangen-
tem semisummæ crurum. Et quod ut Sinus
semisummæ eorundem angulorum, ad Sinum
semidifferentiæ eorundem: ita Tangens semi-
bafis, est ad Tangentem semidifferentiæ cru-
rum: quæ addita semisummæ datæ cruris
& dempta, crus minus. Unde, & hanc Regu-
lam linearem, sicuti & Logarithmicam, in
Epilogo posui, ut quouis horum modorum cal-
culator prohibito uti possit. Vide nunc calcu-
li formam per Log. procedentem, in qua crus
maius inuentum est gr. 80.17, & minus gr. 25.
39, ut supra quoq; ipsum adiuvimus.

In fig. 26.

Angulus, S Z P, datus	gr. 122.48
Angulus, Z S P, datus	21.40
Summa	144.28
Differentia	101.8
Semisumma	72.14
Semidifferentia	50.34
Semibafis, Z S,	32.29 $\frac{1}{2}$
Semisumma crurum, Z P, P S,	52.58
Semidifferentia eorundem	27.29
Crus maius, S P,	80.17
Crus minus, Z P,	25.39

Adde, &
deme.

Per Logarithmos.

r	1051550	r 2	1002122
l 2	980290	l	988782
m	980405	m	980405
m	1012245	m	971309

P R O B L E M A O C T A V V M.

*In triangulis sphericis obliquangulis, datis tribus la-
teribus, seu datis cruribus, & basi, angulum
verticalem inuenire.*

Vfus huius
Probl. insi-
gnis.

VTILISSIMUM est hoc Problema,
præcipue si dentur in Terra duo
loca, seu Ciuitates quarum una
habeat notam longitudinem, &
latitudinem, altera verò tantum latitudi-
nem, de iurque earum distantia in circulo
maximo per eas transeunte, per hoc enim
alterius ignota longitudo manifestatur, ut

patet in mea Centuria Prob. 48. Similiter
per ipsum Crepusculi magnitudinem facile
venari possumus, ut in eiusdem Probl. 45
exemplificatum est. Evidentior tamen
cenfuit eius utilitas in determinando tem-
poris momento data altitudine Solis, ut in
eadem Centuria Prob. 4 manifestò apparet:
vel data altitudine alicuius Stellæ, quod in

Prob.

Prob. eiusdem 19 pariter exemplo illustra-
ui. Hinc enim tempus Eclipsium Luna-
rium, vel ortus Cometarum, & apud Gene-
thiacos natalitium tempus recte stabiliunt.
In presenti ergo tale, ac tantum Problema
iuxta postremam rationem, hoc est data al-
titudine Spicae Virginis pomeridiana ad
Annum 1642, ac d. 14 Aprilis gr. 33.44.15",
Polo gr. 44. 29'. 30", denuo hic elucidare
conabor, quam hic ad initium Eclipsis Lu-
naris tunc effectus observavit Adm. R. P. Io.
Baptista Ricciolus è Societate Iesu Astro-
nomiae cultor eximius, qui praeteris hic
ad huius Opusculi impressionem hortatus
est. Hic verò altitudinem Poli Bononien-
sis plusquam tricies diversis ad hoc adhibi-
tis organis affabre elaboratis se pariter ob-
servasse fateatur, ac semper invenisse gr. 44.
29'. 30" paucis tantum in secundis aliquan-
do reperta differentia, qua idcirco, & ipse
in hoc calculo usus sum. Ut verò momen-
tum temporis exquisitus determinetur, &
ut selectiorum, ac exquisitiorum operatio.

num aliquid hic habeatur exemplum, veni-
tur Canonis Radio 10000000, seu Radij
Log. 10000000, calculosq; usq; ad secun-
da extendemus, qua ratione operandum
erit, quotiescunque exactissimam operatio-
nem exoptabimus.

Assumpto ergo iterum triangulo figura 25,
in eo pariter intelligemus, P, esse polum boreum,
Z, zenith, & S, locum Spicae inter medium
Caeli, & occasum constituta: unde, Z S, comp.
altitudinis Spicae erit gr. 56. 15'. 45", Z P, comp.
elevationis poli gr. 45. 30. 30, & P S, distan-
tia eiusdem Spicae à Polo, Z, nempe aggrega-
tum ex eiusdem declinatione (qua ad datum
tempus reperitur gr. 9. 14'. 56" australis) &
ex gr. 98, erit gr. 99. 14'. 56" (si verò decli-
natio esset borealis, S P, esset comp. eiusdem
declinationis) Ex datis ergo cruribus, P Z,
P S, & basi, Z S, inveniuntur iuxta sequentes
modos angulus verticalis, Z P S, hoc est di-
stantia Spicae à Meridiano jere gr. 18. 24'.
54".

*Primus, & secundus modus per Corollarium 4. Axiomatis
4 Spharicorum, Lineariter, & Logarithmicè
vsurpatum procedens.*

Primò fac ut Radius ad Secantem 2 cu-
iusvis crurum, vt, P S (nempe ad Se-
cantem excessus supra quad. hoc est graduu
9. 14'. 36", quia superat quadrantem) ita
Sec. 2 reliqui cruris, P Z, ad Inuentum.

Secundò fac ut Radius ad Inuentum, ita
differentiam Sinuum verforum basis, Z S, &
differentiae crurum, Z P, P S, ad Sinum
versum anguli verticalis, Z P S, qua siti.

Est autem Sinus versus basis, Z S, 4446112:
differentia crurum, Z P, P S, gr. 53. 44'. 26",
cuiusq; Sinus versus 4085575, qui demptus ex
4446112 relinquit differentiam distorum Si-
naum verforum 360537. Vide ergo calculi for-

mam tam per lineas, quam per Logarithmos,
in qua ultimo habetur Sin. versus 512069, seu
Versilogarithmus 87093286, dati angulorum,
Z P S, grad. 18. 24. 54. Et nota differentia
360537 Log. haberi, querendo ipsum inter Si-
nus, adhibita enim parte proportionali, inveni-
tur eius Logar. 85569498: hic idem verò per
Chiliadem haberi potest, & facilius iuxta Prob.
3 Trig. plana, si illi addantur tres ciphrae, ut
sit 360537000, Characteristica namq; Logari-
thmorum Canonis postulat Si. Ta. & Sec. tribus
notis longiores, ut Num. 27 pralud. Trig. pla-
na dictum est.

Recordare
unitatis pra-
termittenda
in additioni-
bus Logari-
thmorum.

In fig. 25.	Per lineas	I	Per Logarith.
Vt Radius	10000000	r l	0
Ad cruris, P S, gr. 99. 14'. 56" Sec. 2.	10131719	r 2	100056830
Ita cruris, P Z, gr. 45. 30. 30 Sec. 2.	14018318	r 2	101466958
Ad Inuentum	14202966	l	101523783
Deinde.			
Vt Radius	10000000	r l	0
Ad Inuentum	14202966	l	101523783
Ita differ. Si. verforum, Z S, & diff. Z P, P S,	360537	l	85569498
Ad anguli, Z P S, verticalis quaesiti gr. 18. 24'. 54"			
Si. versus	512069	u	87093286

Tertius modus per triangula
rectangula.

IN eodem triangulo fig. 25 demisso perpendiculo λ , Z. communi termino laterum, S Z, Z P, singillatim quadrante minorum, quæ situmque angulum non ambigendum, alioquin Vicarium solutioni sustinendum esset (quod an intra, vel extra, triangulum, Z S P, cadat ostendet operatio) sicut duo arcus, S A, A P (cum cadit intra) vel, S A, A B (cum cadit extra, ut si potius esset in B, triangulumq; propositum esset, Z B S) qui vocantur casus perpendiculari, Z A. Insuper sciendum est, cadente intra perpendiculo, S P, aggregatum casuum, S A, A P, à Nepero vocari veram basim, & basim alternam, S B, differentiam casuum, S A, A P, supposito, A B, ipsi, A P, æquali: at cum perpendiculum cadit extra, ut accideret pro triangulo, Z B S, tunc veram basim vocat ipsam, B S, differentiam casuum, S A, A B, & basim alternam, S P, aggregatum casuum, S A, A B, seu S A, A P. Quoniam verò per Lemma 7 Cap. 5, P, 3 Directorij in triangulo sphaerico obliquo, S Z P, si accipiantur, ut crura ipsa latera, S Z, Z P, cuius est basis vera, S P, est ut Tangens semibasis veræ, S P, ad Tang. semisummæ crurum, S Z, Z P; ita Tang. semidifferentiæ eorundem crurum ad Tang. semibasis alternæ (quæ si sit maior semibasi vera, ut in hoc casu contingit perpendiculum cadit extra, sin minor, intra) ideo

simul adiungemus hos tres Logarithmos, nempe Mes. 2 semibasis veræ hoc est dimidij ipsius, S P, gr. 49.37'. 28" (pro eiusdem Mes. qui esset subrahendus, iuxta Tabellam Prob. 5 Trig. planæ) cum Mes. semisummæ crurum, S Z, Z P, quæ est gr. 50.

53'. 7" $\frac{1}{2}$, & cum Mes. semidifferentiæ eorundem, quæ est gr. 5.22'. 37" $\frac{1}{2}$: fietque

(dempro Binario &c.) Mesol. semibasis alternæ gr. 5.37'. 18", quæ cum sit minor semibasi vera, ostendit perpendiculum intra cadere. Adde ergo semibasim alternam gr. 5.37'. 18" cum semibasi vera gr. 49.37'. 28", fietq; casus maior, S A, gr. 55. 14. 46"; de me, & fiet casus minor, A P, gr. 44. 0. 10". Tandem in triangulo rectangulo, Z A P, ex hyp. Z P, gr. 45. 30'. 30", & crure, P A, gr. 44. 0. 10", per Reg. 5 Epilogi pro Rectangulis inueniemus angulum, P, cuius dato adiacentem iungendo Mes. ipsius, P A, cum Mes. 2 ipsius, Z P, fiet enim (dempta unitate &c.) Log. 2 ipsius anguli, Z P A, quæ sit, qui erit ferè ut supra gr. 18.24. 53", ut patet in sequenti calculi forma, quæ procedit tantum per Log. licet & lineariter idem possis inuenire. Cadente tamen extra perpendiculo quæ situs, Z B S, erit inuenti, Z B A, supplementum.

In fig. 25.

Per Logarith.

Semibasis vera dimidij, S P,	gr. 49.37'. 28"	m 2	99295881
Semisumma crurum, S Z, Z P,	50.53. 7 $\frac{1}{2}$	m	100898557
Semidifferentia eorundem	5.22.37 $\frac{1}{2}$	m	89737013
Semibasis alterna, S B,	5.37.18	m	89931451
Casus maior, S A, summa, S B, S P,	55.14.46	m	99843793
Casus minoris, A P, diff. S B, S P,	44. 0. 10	m 2	9922933
Cruris, Z P,	45.30.30	m 2	99771726
Anguli quæsit, Z P A,	18.24.53	l 2	

G

Quar-

Quartus modus aliter per Logarithmos procedens, qui tamē postulat viraq; crura singillatim quadrante minora.

Iterum assumantur in fig. 26, Z P, P S, tanquam crura, quorum cum, P S, sit quadrante maius, idē Vicarium, Z P C, fig. 26 solutioni substituemus, in quo crur. P C, erit gr. 80. 45'. 4'', crur. P Z, gr. 45. 30'. 30'', & basis, Z C, comp. ipsius, Z S, erit gr. 123. 44'. 15' : Inuestigetur autem angulus verticalis, Z P C, cuius suppl. Z P S, erit angulus quæsitus.

Primo ergo Tomolog. differentie crurum iunge cum Log. 2 basis, & fiet Log. 2 arcus dimidiandi, dempta tamen Vnitate ultimo loco ad sinistram.

Secundo coniice in vnam summam duos Log. arcus dimidiati (vel duos eiusdem) Log. 2 cum basis est quadrante maior) cum Tomolog. 2 vniuscuiusque crurum, & cum Log. 2 differentie eorundem, & fiet summa (relicta ultimo loco ad sinistram tantum

Vnitate) cuius dimidium erit Logarithmus semianguli verticalis, ex quo ipsum integrum obtinebis.

Hac Regula pariter pendet ex Prob. 36. mea Centuria, vt Regula 4. modi Probl. 4., ac 6. Vide sequentem eius calculi formam, in qua secunda Logarithmorum summa (relicta ultimo loco ad sinistram tantum Vnitate) est 199887355, qua signatur duplici, ll., vt agrosatur dimidianda esse, ad habendum Log. 99943677, cui respondet semiangulus, Z P C,

grad. 80. 37'. 32'' $\frac{1}{2}$, unde integer angulus,

Z P C, qui scribitur è regione duplicis, ll., est gr. 161. 35'. 5'', quapropter eius suppl. Z P S, angulus verticalis quæsitus est grad. 18. 24'. 55''.

In fig. 26.

Per Logarith.

Differentia crurum, Z P, P C,	gr. 35. 14'. 34''	l 2	100879299
Basis, Z C,	123. 44. 15	l 2	97445973
Arcus dimidiandus	47. 9. 15	l 2	98325272
Arcus dimidium	23. 34. 37 $\frac{1}{2}$	l 2	99621433
Idem Log. 2		l 2	99621433
Crur. maius, P C,	80. 45. 4	l 2	100056830
Crur. minus, P Z,	45. 30. 30	l 2	101466958
Differentia crurum, Z P, P C,	35. 14. 34	l 2	99120701
Angulus verticalis, Z P C,	161. 35. 5	ll	199887355
Semianguli verticalis, Z P C,	80. 47. 32 $\frac{1}{2}$	l	99943677

Quintus modus pariter per Log. procedens, & nulli casuum observationi alligatus.

Iunge Tomolog. 2 crurum cum Log. semisumma, & cum Log. semidifferentie basis, & differentie eorundem crurum, & (relicta ultimo loco ad sinistram tantum Vnitate) fiet Logarithmus cuius dimidium erit Logarithmus semianguli verticalis, ex quo integrum angulum verticalem obtinebis.

Vel, si maius, iunge Tomolog. 2 crurum cum Log. semisumma, & cum Log. semi-

differentie basis, & aggregati eorundem crurum, & (relicta ultimo loco ad sinistram tantum Vnitate) fiet Log. cuius dimidium erit Log. 2 semianguli verticalis &c.

Haec duo Regulae sunt quoq; in Compendio, necnon in Directorio P. 3. Cap. 7. pag. 308. ubi pariter demonstrantur, ac exemplificantur. Vide nunc calculi formam, iuxta viraq; Regulas circa triangulum, Z P S,

In

Problema octauum.

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In fig. 25.		Per Logarith.	
Cruris, P S,	gr. 99.14.56 ^h	r 2	100056830
Cruris, P Z,	45.30.30	r 2	101466958
Differentia crurum, P S, P Z,	53.44.26		
Basis, Z S,	56.15.45		
Summa	110. 0.11		
Differentia	2.37.19		
Semisumma	55. 0. 5 $\frac{1}{2}$	l	59133726
Semidifferentia	1.15.39 $\frac{1}{2}$	l	83425392
Angulus verticalis, Z P S, quæsitus	19.24.54	ll	184082906
Semianguli, Z P S,	9.12.27	l	92041453

Vcl.		Per Logarith.	
Cruris, P S,	gr. 99.14.56	r 2	100056830
Cruris, P Z,	45.30.30	r 2	101466958
Aggregatum crurum, P S, P Z,	144.45.26		
Basis, Z S,	56.15.45		
Summa	201. 1.11		
Differentia	88 29.41		
Semisumma	100.30.35 $\frac{1}{2}$	l	99926523
Semidifferentia	44.14.50 $\frac{1}{2}$	l	98437045
Angulus verticalis, Z P S, quæsitus.	18.24.55	ll 2	109837356
Semianguli, Z P S,	9.12.27 $\frac{1}{2}$	l 2	99943678

Inuenio igitur angulo verticali, Z P S, gr. 18.24. 54^h, qui est distantia Spicæ, S, à Meridiano, hæc coniungenda est cum eiusdem stellæ ascensione recta, quæ ad dictum tempus reperitur gr. 196. 37. 54^h (& hoc quia est in parte occidentali, at si esset in orientali talis distantia ex eadem ascensione recta esset subtrahenda) fietq; ascensio recta medij Cœli gr. 215. 2. 48^h, à qua si dematur 50^h is ascensio recta gr. 23. 20. 17^h (eius enim locus circa tempus obseruationis fuit circiter in gr. 25. 12^h Arietis) additis illi gr. 360, quando subtrahi non posset, remanebunt gr. 191. 42. 31, qui si in tempus conuertantur (computando pro singulis gr. 15 vnâ horam, & pro vno gradu quatuor horarum minuta) fient horæ post meridiem 12. 46. 50^h tempore prædictæ obseruationis.

Nota autem stellarum fixarum 100, quæ meæ Praxi Astrologica addita sunt declinationem, & ascensionem rectam ad 200 Annos, nempe 100 ante Radicem 1600, & 100 potest, facile per partem proportionalem incrementi, vel decrementi eorundem haberi posse, ut in

eadem Praxi Cap. 10 explicatur. Vel pro omnibus per Tychonis Tabulam postam Tomo primo Pragm. & exquisitis per Cap. 3 dista Praxi Astrologica sumpta eiusdem longitudine, & latitudine ex Catalogo eiusdem Tychonis. Porro in superioribus calculis animaduertere potes, quando graduum, min. & sec. sumendus est Si. 2 vel Logar. 2, Tac 2 vel Mef 2 Sec 2, vel Tom. 2, quod facilius est scorsim scribere ipsorum graduum, min. & sec. comp. eiusque sumero Sin. vel Log. vel Mef. &c. ut in fine Prob. primi Trig. plana dicebatur. Sic ut contra pro arcu ex gr. Log. 2, melius erit extrahere arcum proprium ipsius Logar. eiusq; capere comp. & sic ut ceteri quibuscunque, ut in fine Prob. 2 eiusdem Trig. plana pariter innuebatur. Posses quoque in calculis, qui sunt ad gr. min. & sec. unum gr. & min sumere respondentem Sinum, vel Logar. aut Mef. &c. scribendo scorsim sequentem differentiam, eiusq; partem proportionalem super scribere additis in vnâ summam, facilius enim videtur vno actu omnia in vnâ summam colligere; quod tamen pro tui libito exequeris.

G 2

PRO

PROBLEMA NONVM.

In triangulis sphericis obliquangulis, datis tribus angulis, seu angulo verticali, & duobus basi adiacentibus: ipsam basim inuenire.

HVIVS Problematis solutio pendet ex hac veritate: quod nempe in omni triangulo sphærico mutari possunt latera in angulos, & anguli in latera; assumpto tamen prius pro vni-quoquo angulo, & suo subtendente late- c suis supplementis. Vt ex.gr. est triangulum sphæricum, G I H, fig. 3, quod supponamus obliquangulum, cuius angulus, G, est gr. 46, H, gr. 114, & I, gr. 24: sumpto autem pro quocunq; angulo, vt pro, G, eius suppl. gr. 134, dico hos angulos gr. 134, gr. 114, & gr. 24, mutari posse in latera, vt fiat ex illis ex.gr. triangulum sphæricum, K L M, fig. 4, in quo, L M, sit gr. 134, respondens suppl. anguli, G, & K M, gr. 114 respondens angulo, H, ac, K L, gr. 24 respondens angulo, I. Erit autem vicissim angulus, K, suppl. lateris, I H, angulus, L, æqualis lateri, G I, & angulus, M, æqualis lateri, G H. Quod ego ostendi in Directorio P. 3, Cap. 1. ad def. 13, vbi hæc triangula dixi reciproca vocari. Idem probat Maginus in Primo Mobili lib. primo Cap. 6, Pitiscius, & alij &c. Si ergo in triangulo sphærico quocunq; dentur anguli, eorum duo quicunq; ac tertij suppl. commu-

tabuntur in latera; deinde ex datis facti trianguli lateribus inuenientur anguli per Probl. antec. hoc est latera trianguli prioris quaesita. Vt sit in triangulo, G I H, datorum angulorum quæraturs lateris, G H, in eius triangulo reciproco, K L M, ex datis lateribus, quæremus angulum, M, qui erit latus quaesitum, G H. Ita angulus, L, daret, G I, &, K, suppl. ipsius, I H. Verum ne circa hanc commutationem angulorum in latera calculatori, sit laborandum, sequentes Regulas, quæ sunt inuicem earum, quæ traditæ sunt in Prob. ant. concinnauimus, quibus sine respectu ad triangulum reciprocum (quo mediante tamen effecta sunt) poterit operari.

Supponamus nunc ergo in fig. 26, Z, S, P, esse vertices trium locorum in Terra, quorum dentur anguli positionum, vt, Z P S, gr. 60. 12', P Z S, gr. 109. 6, & Z S P, gr. 32. 16', quæraturs autem latus quodecunq; vt, Z S (quod assumetur, vt basis) correspondens distantie duorum locorum, Z, S, hanc ergo per sequentes modos inueniemus esse gr. 64. 6'.

Primus, & secundus modus per Cor. 5 Axiomatis 4 Sphericorum, lineariter, & Logarithmicè usurpatum procedens.

Primò fac vt Radius ad angulorum basi, Z S, adiacentium cuiusvis, vt, P Z S, gr. 109. 6' Sec. 2, hoc est ad comp. P Z S, gr. 19. 6' (excessus supra quad.) Secantem; ita anguli reliqui adiacentis, Z S P, gr. 32. 16' Sec. 2 ad Inuentum.

Secundo fac vt Radius ad Inuentum, ita Sinuum versorum (quorum vnus est anguli, Z P S, verticalis, alter vero differentie inter, Z S P, & suppl. anguli, S Z P, basi, Z S, adiacentium) differentiam ad Sinum versum basis, Z S, quaesita.

Est autem anguli, Z P S, gr. 60. 12' Si. versus 50303. Cum vero angulus, Z S P, sit gr. 32. 16', & S Z P, gr. 109. 6', huius suppl. erit

gr. 70. 54, a quo dempto, Z S P, gr. 32. 16', remanebit differentia gr. 38. 38', cuius Si. versus est 21884, qui subtrahitur ex superiori 50303 relinquit postquam in sequenti calculo differentiam 28419. Huius autem Logarithmum habebis vel Canonem, vel per Chiliadem, vt Probl. ant. ad primum, & secundum modum dicebatur, habita ratione Characteristica. Ac tandem cum Sinu verso 56334, vel cum Versilog. 975077 inuenies per Probl. 2 Trig. plana respondentem arcum basim, Z S, gr. 64. 6'. Vide nunc calculi formam, in cuius duobus Logarithmorum additionibus recordare Vnitatis delecta &c.

Problema nonum.

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In fig. 26.		Per Logarith.	
Vt Radius	100000	r l	0
Ad anguli, S Z P, Sec. 2, hoc est ad gr. 19. 6' Sec.	105826	r	1002459
Ita anguli, Z S P, gr. 32. 16' Sec. 2.	187315	r 2	1027257
Ad Inuentum	198228	l	1029716
Deinde,			
Vt Radius	100000	r l	0
Ad Inuentum	198228	l	1029716
Ita Si. versorum &c. differentis	28419	l	945361
Ad basis, Z S, gr. 64. 6' Si. versum	56334	u	975077

Poterant quidem hic superaddi duo alij modo reciprocè respondentes tertio, & quarto modo Probl. ant. sed breuitatis causa hic præmittuntur, præsertim cum sint conditionibus alligati, necnon quia calculator poterit per eos-

dem hoc quoque Problema soluere, si voluerit, mediante triangulo reciproco, vt supra dictum est. Tertius ergo modus erit, qui subsequitur, quique nulli casuum subiaceat obseruationi.

*Tertius modus per Logarithmos procedens, ac ab omni casuum obseruatione absolutus, qui est recipro-
cus quinto modo Prob. ant.*

PRIMO Tomolog. 2 angulorum basi adiacentium iunge simul cum Log. semisumma, & cum Log. semidifferentia supplementi anguli verticalis, & differentia eorundem angulorum ad basim, fietque (relictâ vltimo loco ad sinistram tantum Vnitatē) summa, cuius dimidium erit Log. 2 semibasis quæ sitæ, ex quo integram basim obtinebis.

Vel, si mauis, Tomolog. 2 angulorum basi adiacentium iunge simul cum Logar. semisumma, & cum Logar. semidifferentia supplementi anguli verticalis, & aggregati eorundem angulorum ad basim, fietque (relictâ vltimo loco ad sinistram tantum Vnitatē) summa, cuius dimidium erit Log. se-

mibasis quæ sitæ &c.

Vide nunc calculorum formas similes hīs, qui Prob. ant. quinto modo adiecti sunt, præbentes eandem basim, Z S, vt supra gr. 64. 6'. Aduerte autem cum debes sumere Logar. semisumma gr. 98. 19', quod sumendus est Log. suppl. eorundem, hoc est grad. 81. 41', vel potes etiam, & est facilius sumere Log. 2 eius excessus supra gr. 90, nempe Logar. 2 graduum 8. 19. Similiter pro Log. semisumma gr. 130. 35' vel sumes Logar. suppl. hoc est graduum 49. 25, vel Log. 2 comp. hoc est excessus supra gr. 90, nempe graduum 40. 35', vt monui Probl. primo, Trigon. plana. Summa vero Logarithmorum notatæ duplici, 11, vel, 12, docent eam summam esse dimidian-

Juxta moni-
tum Probl. 2
Trigon. plana
pro gradibus
supra 90, &
infra 180.

In fig. 26.		Per Logarith.	
Anguli, P Z S,	gr. 109. 6'	r 2	1002459
Anguli, Z S P,	32. 16	r 2	1027257
Differentia angulorum, Z, S,	76. 50		
Suppl. anguli verticalis, Z P S,	119. 48		
Summa	196. 38		
Differentia	42. 58		
Semisumma	98. 19	l	999541
Semidifferentia	21. 29	l	956375
Basis, Z S,	64. 6	ll 2	1985632
Semibasis, Z S,	32. 3	l 2	992816

Vel.

Vel.			
Anguli, P Z S,	gr. 109. 6'	t 2	1002945
Anguli, Z S P,	32.16	p 2	1012257
Aggregatum angularum, Z, S,	141.22		
Suppl. anguli verticalis, Z P S,	119.48		
Summa	261.10		
Differentia	21.34		
Semisumma	130.35	l	988051
Semidifferentia	10.67	l	927206
Basis, Z S,	64. 6	ll	1944973
Semibasis, Z S,	32. 3	l	972486

P R O B L E M A D E C I M V M.

Rationem reddere illius modi inueniendi ad datam Poli elevationem Circulumpositionis Significatoris extra angulos Figura celestis constituti; quem attuli in Appendice Praxis Astrologica pro Directionibus consiciendis

Cap. 4.

ANTEQVAM Trigonometrie Sphæricæ finem imponam huic rei, Astrologia professoribus fortè nō iniucunda, hic demonstrationem adiungere decreui, quam apud neminem adhuc vidi, vt pluribus satisfacerem, qui

eandem se exoptare mihi significarunt. At qui Astrologica negligit, vel à demonstrationum spinosis difficultatibus abhorret, hanc vt non necessariam relinquere poterit.

Lemma.

IN quocunque triangulo sphærico, vt, Z P S, vel, Z B S, fig. 25, cuius assumpta crura, Z S, Z P, vel, Z S, Z B, sint singillatim quadrante minora: siue perpendicularum 2, Z, vertice ad basim, S P, ductum, vt, Z A, cadat intra triangulum, vt contingit pro, Z P S, vel extra, vt pro, Z B S. Est vt Sinus aggregati complementorum crurum ad Sinum eorundem differentia: ita Tangens 2 semianguli verticalis, S Z P, ad Tangentem semidifferentia angularum, S Z A, A Z P, ipsi perpendicularo Z A, adjacentium, & hoc in triangulo, S Z P. At in, S Z B, ita Tangens 2 semianguli verticalis, S Z B, ad Tangentem semisumma angularum, S Z A, A Z B, eidem perpendicularo adjacentium.

Examinetur primò veritas in triangulo, Z P S. Cum ergo ex Lemmate 4, Cap. 5. P. 3 Directori (quod positum est pariter in

Compendio pag. 85) Tangentes 2 crurum, S Z, Z P, Sinibus 2 angularum, S Z A, A Z P, directe sint proportionales: si fiat triangulum rectilineum, vt ex. gr. in fig. 27, I H K, in quo angulus, I, sit comp. anguli, S Z A, & K, comp. anguli, A Z P: erit vt Tangens 2, S Z, ad Tang. 2, Z P, ita Sin. 2 anguli, S Z A, hoc est Sinus anguli, I; ad Si. 2 anguli, A Z P, hoc est ad Sinum anguli, K. Cum verò Tangentes 2 crurum, S Z, Z P, sint vt Sinus angularum, I, K: erit aggregatum Tangentium 2, nempe Tangentium complementorum crurum, S Z, Z P, ad eorundem differentiam; vt aggregatum Sinuum angularum, I, K, ad eorundem differentiam. At vt aggregatum Tangentium complementorum crurum, S Z, Z P, ad eorundem differentiam: ita est Sinus aggregati complementorum eorundem crurum, S Z, Z P,

Nā si ex. gr. est 5 ad 7, vt 20 ad 28; etiam aggregatum ex 5, 7, nempe 12, est ad eorundem differentiam 2, vt aggregatum

ad

gatum ex 20,
et 28, nempe
48 ad eorum
differentiam
8.

ad Sinum eorum differentia, per Lem. 3
demonstratum in meo Compendio pag. 101.
Et ut aggregatum Sinuum angulorum, I, K,
ad eorum differentiam, ita aggregatum la-
terum, I H, H K, ad eorum differentiam
(sunt enim latera, I H, H K, Sinibus angu-
lorum, I, K, directe proportionalia per
Axioma 2 Planorum) & ut aggregatum la-
terum, I H, H K, ad eorum differentiam,
ita est Tangens semisumma angulorum, I,
K, ad Tangentem anguli infra, vel supra di-
midium per Axioma 3 Planorum. Ergo ut
Sinus aggregati complementorum crurum,
S Z, Z P, ad Sinum eorum differentia,
ita Tangens semisumma angulorum, I, K,
ad Tangentem eorum differentia, hoc est ita
Tangens semisumma comple-
mentorum S Z A, A Z P (eorum enim
complementis positi sunt aequales anguli, I,
K) id est ita Tangens compl. seu secunda
semianguli verticalis, S Z P, ad Tangentem
semidifferentia complementorum angulo-
rum, S Z A, A Z P. Quoniam vero differ-
entia duorum arcuum, vel angulorum qua-
drante minorum eadem est differentia co-
plementorum eorundem (ut si eorum unus
sit gr. 70, & alter gr. 80, quorum differentia
est gr. 10, eadem est inter gr. 20, & gr. 10
praedictorum complementa) ideo semidif-
ferentia complementorum angulorum, S Z A,
A Z P, vel, si nautis dicere, differentia se-
micomplementorum eorundem, aequabitur
differentia semiangulorum, S Z A, A Z P,
vel, quod idem est, aequabitur semidif-
ferentia angulorum, S Z A, A Z P. Ergo in
triangulo, S Z P, Sinus aggregati comple-
mentorum crurum, S Z, Z P, ad Sinum eo-
rundem differentia, erit ut Tangens secun-
da semianguli verticalis, S Z P, ad Tangen-
tem semidifferentia angulorum, S Z A, A Z P.
Patet ergo Lemmatis veritas in triangulo,
S Z P.

Sit nunc eadem veritas examinanda circa
triangulum, Z B S, extra quod cadit, Z A,

perpendiculum: in gratiam vero demon-
strationis supponatur, A P, aequalis ipsi,
A B, ducto enim maximi circuli arcu, Z P,
ille aequabitur ipsi, Z B, ut & angulus,
B A Z, ipsi, A Z P, hoc enim ostenditur ad
modum prop. quarta Primi Elementorum,
quae in sphaericis quoque verificatur, ut osten-
dit Clavius de Triangulis sphaericis prop. 7.
Ergo cum ostensum fuerit quod ut Sinus
aggregati complementorum crurum, S Z,
Z P, ad Sinum eorum differentia, ita Tan-
gens 2 anguli, S Z P, verticalis est ad Tan-
gentem semidifferentia angulorum, S Z A,
A Z P, & cum, P Z, sit aequalis ipsi, Z B, &
angulus, P Z A, ipsi, A Z B: erit quoque ut
Sinus aggregati complementorum crurum,
S Z, Z B, ad Sinum eorum differentia,
ita Tangens 2 semianguli verticalis, S Z P,
ad Tangentem semidifferentia angulorum,
S Z A, B Z A. Est autem eorum diferen-
tia ipse angulus verticalis, S Z B, in trian-
gulo, S Z B: ergo ut Sinus aggregati com-
plementorum crurum, S Z, Z B, ad Sinum
eorundem differentia, ita Tangens 2 se-
mianguli, S Z P, ad Tangentem semianguli,
S Z B. At quia Tangentes duorum ar-
cuum, vel angulorum Tangentibus 2 co-
rundem sunt reciproce proportionales: ut
ostendi in Direc. P. 1, Cap. 7, & ut probat
Maginus in Primo Mobili Lib. 1 Cap. 3,
Analogia 5, ideo ut Tangens 2, seu com-
plementi semianguli, S Z P, ad Tangentem
semianguli, S Z B, ita reciproce erit Tan-
gens 2, seu comp. semianguli, S Z B, ad
Tang. 2 complementi, hoc est ad Tangen-
tem ipsius semianguli, S Z P. Ergo ut Si-
nus aggregati complementorum crurum,
S Z, Z B, ad Sinum differentia eorundem,
ita Tangens 2 semianguli verticalis, S Z B,
erit ad Tang. semianguli, S Z P, nempe ad
Tangentem semisumma angulorum, S Z A,
A Z P, seu, S Z A, B Z A. Unde in trian-
gulo quoque, S Z B, manifestum est, quod
propositum erat.

Corollarium.

Hinc in triangulo sphaerico quocumque; cuius
crura sint singulatim quadrante mino-
ra, datis usdem cruribus, & angulo verticali,
ductoque a vertice super basim perpendiculo,
utriusque anguli praedicti perpendiculo adiacentes
notificabuntur. In triangulo enim, ut, S Z P,
eiusdem fig. 25, in quo perpendiculum cadit
intra, faciemus ut Sinus aggregati comple-
mentorum datorum crurum, S Z, Z P, ad Si-
num eorum differentia, ita Tangentem
secundam semisumma angulorum, S Z A,
A Z P, hoc est Tang. 2 semianguli vertica-
lis, ad Tangentem semidifferentia eorumdem,

qua addita dicta semisumma, seu semiangulo
verticali, S Z P, faciet angulum maiorem, &
dempta, angulum maiorem. At cum perpen-
diculum cadet extra, ut cum triangulum erit
quale, S Z B: faciemus, ut Sinus aggregati
complementorum crurum, S Z, Z B, ad Si-
num eorum differentia, ita Tangentem
secundam semidifferentia angulorum, S Z A,
B Z A, hoc est semianguli verticalis, S Z B, ad
Tangentem semisumma eorumdem angulorum,
cui addita semidifferentia, seu semiangulo
verticali, S Z B, fiat angulus maior, & dem-
pta, fiat angulus minor.

Appli-

*Applicatio predictorum Circuli positio-
nis inuentioni.*

SIt in fig. 28 Meridianus, A B C D, & in eo polus septentrionalis, E, & meridionalis, L. Similiter sit in hæmisphærio orientali (in quo semper erit Significator, vel Significatoris oppositum, quæ sunt semper in eodem circulo positionis, pro Significatore enim posito in parte occidentali eius opposito utimur) medietas Equatoris, A N C, Horizontis obliqui cuiuscunque, B N D. Dentur autem duo Significatores (vel Significatorum opposita) H, S, habentes declinationem septentrionalem, ac minorem ipso, D C, complemento elevationis poli, tales enim dirigi solent, quorum, H, sit supra Terram, & S, infra. Per, H, S, verò, & B, D, communes sectiones Meridiani, & Horizontis transeant semicirculi positionum, B H D, B S D, secantes Equatorem in punctis, G, K. Et sint ducti maximorum circularum per polos, E, L, & per, G, K, H, S, transeuntium quadrantes, E G, E K, E H F, E S M. Erunt igitur iuxta doctrinam sphericam, H F, S M, Significatorum, H, S, seu oppositorum & declinationes, ipso, D C, minores. Ducatur nunc ab, E, super semicirculum positionis, B H D, perpendicularis arcus, E O, qui erit quadrante minor, cum angulus, E D O, cui opponitur, sit acutus, est enim minor recto, E D N. & cum debeant specie concordare iuxta Reg. primam Num. 8. Insuper cadet intra triangulum, H E D, per Num. 6, est enim quoque acutus, E H D, etenim cum, F H, supponatur minor, C D, & E F, E C, sint æquales, quippe qui sunt maximorum circularum quadrantes, erit, E H, maior, E D, ergo angulus illi oppositus, E D H, erit maior, E H D, sed, E D H, est acutus, ergo & E H D, erit acutus, & ideo perpendicularis, E O, cadet intra triangulum, H E D. Si ergo dentur Significatoris, H, vel oppositi &c. longitudo, & latitudo, habebitur eius declinatio, & ascensio recta, prumptius quidem per Tabulas, & paulò difficilius, sed vniuersalius per mæx Praxis Astrologicæ Cap. 1: à cuius ascensione recta dempta ascensione recta Medij Cæli, quæ datur ex gradu noto ipsius Medij Cæli in fig. cælesti, remanebit notus arcus Equatoris, A E F, vel illi analogus angulus, A E F, qui est distantia Significatoris, vel oppositi &c. H, à Medio Cæli, & subinde notū erit eius suppl. F E C, vel, H E D, angulus verticalis trianguli, H E D. Similiter nota elevatione poli, E D, sit notum eius compl. D C, & est nota declinatio, H F, ergo erunt nota complemen-

Vt in planis.

ta, crurum, H E, E D. Si ergo simul addantur, minuq; ex maiori detrahatur, fiatq; vt Sinus aggregati ipsorum, D C, comp. elevationis poli, & H F, declinationis, ad Sinum eorundem differentia; ita Tangens 2, seu comp. semianguli verticalis, H E D, hoc est ita Tangens semidistantiæ, A E F, à Medio Cæli ad quartum, exibat per superius ostensa, Tangens semidifferentiæ angularum, H E O, O E D, quia perpendicularis, O E, cadit intra. Fft autem semidifferentia angularum, H E O, O E D, æqualis semidifferentiæ eorundem complementorum, vt in Lemmate probabatur, quod serua. Insuper quia in triangulo rectangulo, G E O, hypotenusa, G E, est quadrans, alter angulorum eidem adiacentium erit rectus per Reg. 3 Num. 8. at, E G O, est acutus, quia specie cum, E O, perpendiculari concordat, quod est quad. minus, cum opponatur acuto, E D O: ergo, G E O, erit rectus, vnde, G E H, seu, G E F, erit comp. ipsius, H E O, & A E G, ipsius, O E D. Habemus ergo notam semisummam duorum angulorum, A E G, G E F, & eorum semidifferentiam. Et quoniam, A E G, maior est, G E F, quia per Lem. 4 P. 3. Directæ Tangentes secundæ crurum, D E, E H, Sinibus secundis angularum, D E O, O E H, directæ sunt proportionales. Hoc est Tangens, D C, ad Tang. H F, est vt Sinus comp. D E O, ad Sinum comp. O E H, nempe vt Sinus anguli, A E G, ad Sinum anguli, G E F, & est Tangens, D C, maior Tang. H F, quia, D C, ponitur maior, H F, ergo, A E G, erit maior, G E F, quia vtriq; sunt acuti. Inuenta ergo semidifferentia angularum, A E G, G E F, addita eorum semisumma, hoc est semidistantiæ, A E F, faciet angulum maiorem, A E G, hoc est arcum, A G, qui est arcus positionis ipsius, H. Ergo cum Significator, vel Significatoris oppositum constitutum in parte orientali habet declinationem septentrionalem supra Terram, minorem complemento elevationis poli, si fiat vt Sinus aggregati ex declinatione, & comp. elevationis poli, ad Sinum eorundem differentia; ita Tangens eiusdem semidistantiæ à Medio Cæli ad quartum: Vel per Logar. si simul adidemus hos tres Logarithmos, nempe Tomolog. 2 aggregati (pro Logar. qui esset subtrahendus) ex declinatione Significatoris, seu oppositi &c. & comp. elevationis poli, cum Log. eorundem semidifferentiæ, & cum Mes. semidistantiæ à Medio Cæli, fiet (dempto Binario &c.) Mesol. arcus, superius verò fiet Tangens eiusdem arcus

(quem

Aduerte tamen in Appendice pro Tem. 2 nos vti Res Log. & in summa demere tantum Vnitatē.

(quem voco arcum adiunctum, quia semper addendus est semidistantia à Medio Cœli, cum declinatio minor est complemento elevationis poli, vt fiat arcus positionis Significatoris, vel oppositi &c.) addendi semidistantia, & veniet arcus positionis dicti Significatoris, vel oppositi &c. Hæc autem est prior operatio, quæ per Logar. exercetur in præfato modo, vt in inferiori calculi forma manifestum est.

Pro Significatore verò, seu Significatoris opposito, S, habente declinationem septentrionalem infra Terram, quæ idcirco necessariò minor est ipso, D C, ducto perpendicularo ab, E, super semicirculum positionis, B K D, illud cadet extra triangulum, E S D, etenim, E D S, est obtusus, & E S D, est acutus: continuato enim arcu, B K D, versus, D, angulus exterior, E D T, est acutus, cum sit æqualis ipsi, K D C, supplemento obtusi, A D K, estq; maior ipso, E S D, nam, S E, B D, simul sunt semicirculo minores, ergo & E S D, est acutus: perpendicularum

Regiom. lib. 3, prop. 47.

Per Corollarium Lemmatis.

Per Reg. 3. Num. 8 prædialit.

ergo cadet extra, E S D, cum verò possit cadere ab, E, & ad partes, S, & ad partes, D, ipsum sumemus ad partes, D, quale sit, E T, oppositum acuto, E D T, & ideo quadrante minus. Si ergo fiat vt Sinus aggregati ex compl. eorum, E D, E S, hoc est aggregati ex, C D, comp. elevationis poli, & ex, M S, declinatione ipsius, S, ad Sinum eorum differentia, ita Tang. 2, seu comp. semianguli, S E D, nempe ita Tangens semidistantia, A E M, ipsius, S, à Medio Cœli, ad quartum, exhibet Tangens semisummæ angulorum, S E T, D E T, quia perpendicularum, E T, cadit extra. Quoniam vero si addatur semidifferentia angulorum, S E T, D E T (quæ est etiam semidifferentia complementorum eorum angulorum, vt in Lemmate probatur, quilibet enim duo arcus singillatim quadrante minores habent communem differentiam cum suis complementis) id est semidifferentia complementorum eorum angulorum, S E T, D E T, quæ est semiangulus, S E D, semisummæ eorum complementorum fit complementum maius, hoc est compl. anguli minoris, D E T, nempe fit angulus, K E D (cum enim, E K, hypotenusa in triangulo rectangulo, E K T, sit quadrans, alter angulorum illi adiacentium, nempe, K E T, rectus erit, reliquus enim, E K T, est acutus, eiusdem nempe speciei cum perpendicularo, E T) id est fit, K C, arcus positionis ab Imo Cœli. Idcirco si addatur comp. illius semidifferentia, seu semianguli, S E D, nempe semidistantia, A E M, semisummæ angulorum, S E T, D E T, fiet arcus positionis, A K, à Medio Cœli. Nam si arcus, vt gr. 20 additus arcui, vt gr. 30, facit arcum gr. 50: comp. arcus, nempe gr. 70 additum comp. arcus, nempe gr. 60, dat suppl. prius facti arcus, nempe gr. 130. Ergo si fiat vt Si. aggregati ex, C D, S M, ad Sin. eorum differentia, ita Tangens semidistantia, A E M, ad quartum, emerget Tangens ar-

cus adiunctui semidistantia, vt componatur arcus positionis, A K, ipsius, S, à Medio Cœli. Vel si iunxeris Tomolog. secundum aggregati ex, D C, S M, cum Logar. eorum dem differentia, & cum Mes. semidistantia, A E M, fiet (dempto Binario &c.) Mesol. arcus adiunctui semidistantia, vt componatur arcus positionis, A K, à Medio Cœli, qualiter procedit prior calculi operatio.

Non dissimiliratione fiet demonstratio in hæmisphærio australi, A B C, siue Significatoris, aut Significatoris oppositi, habeat declinationem meridionalem infra Terram, pro qua vtetur ex. gr. triangulo, B L P, in quo cadit intra perpendicularum, L R: siue supra Terram, pro qua vtetur triangulo simili ipsi, E S D, in quo perpendicularum cadet extra: ostendemusq; colligi ex priori calculi operatione arcum positionis ab Imo Cœli, à quo semidistantia intelligitur in declinatione australi computari.

Remanet casus quando declinatio superat comp. elevationis poli, vt si, F H, supponatur maior, D C, & tunc, veluti cum declinatio superabatur ab eodem comp. superius ostensum est arcum positionis, A G, ipso, G F, maiorem esse, ita hic & contra ostendemus, A G, ipso, G F, minorem esse, & ideo arcum inuentum non esse in hoc casu adiunctum, sed subtractum à semidistantia, vt prodeat arcus positionis, qui erit à Medio Cœli in declinatione septentrionali supra Terram, & ab Imo Cœli, in declinatione meridiana sub Terra. Non poterit autem Significator, vel Significatoris oppositum habere declinationem septentrionalem infra Terram, vel meridianam supra Terram, tunc enim eius declinatio complementi elevationis poli minor esset, quod esset contra hypotesin. Similiter aduerte si declinatio, vt, H F, æquaretur ipsi, D C, quod tunc eadem ratione probaretur, A G, æquari ipsi, G F, & in tali casu semidistantia, seu dimidium, A F, esset arcus positionis, A G, quæ sit.

Quod si Sig. vel Sig. oppositum esset in, I, cadente perpendicularo, O E, extra triangulum, O I D, ad partes, I, ostenderemus vt supra angulum, G E O, esse rectum, & subinde, G E I, vel, G E M, seu arcum, G M, esse quadrante maiorem, & A G, quadrante minorem, & idcirco inuentum arcum similiter à semidistantia, A M, subtrahendum esse, vt habeatur arcus positionis, A G, à Medio Cœli in declinatione septentrionali supra Terram, vel ab Imo Cœli in meridionali sub Terra.

Habito arcu positionis, vt, A G, in triangulo rectangulo, A B G, ex datis cruribus, B A, comp. elevationis poli, & A G, arcu positionis per Reg. 14 Epilogi pro sphaericis rectangulis inuenitur angulus, A G B, addendo Mes. cruris, B A, hoc est Mes. comp. elevationis polaris cum Tomolog. 2 arcus positionis, A G, & fit (dempta Vnitare &c.) Mes. anguli, A G B, quem

H

facit

rite ta-
na Ap-
te pro
2. nos
f. Log.
summa
e tan-
nitare.

facit Aequator cum Horizonte, qui est comp. elevationis poli, hoc est sit Mes. 2 elevationis poli super circulum positionis, B G D, nempe Mes. 2 ipsius, arcus, E O. Aliter quoque, potest addi pro Mes. 2 elevationis poli, eius Mes. cum Log. arcus positionis, A G, & fiet (dempta Unitate &c.) Mes. eiusdem circuli positionis, seu arcus, E O: hi enim Logarithmi sunt prædictorum residua ad duplum Log. Radij, ut ad 2000000, quem modum retinui in Exemplis dictæ Appendicis, quorum unum, nempe pro inveniendi circulo positionis Solis hic libuit adiungere, ut ex eorum ratio intelligi possit.

Exemplum
inveniendi
circulum po-
sitionis Solis.

Supponitur autem Sol in parte Cæli ascendente, in gr. 12.5. 42" Geminarum, unde eius declinatio, E, est gr. 22. 20' sept. & A, ascensio recta gr. 70. 35, Medium Cæli gr. 7. 44 Arietis, cuius ascensio recta, B, est gr. 7. 6, qua dempta ex A, asc. recta Solis relinquit, C, distantiam à Medio Cæli gr. 63. 29, unde, H, semidistantia est ferè gr. 31. 44. Est verò summa complementi elevationis poli, ad quam erecta est figura cælestis, nempe ipsius, D, & E, declinationis, qua est, F, & G, eorundem differentia. Deinde cum fieri debeat ut Sinus summa, seu aggregati ex, D, E, ad Sin. eorundem differentia, ita Tangens semidistantia, H, ad Tang. arcus adiunctius, ideo per Prob. 5 Trig. plana addendi essent in unam summam Tomolog. 2 summa, F, cum Logarithm. differentia, G, & cum Mesel. H, fieretque (dempta Binario &c.) Mes. arcus adiunctius: verum in Appendice, quia Tabula caret Tomologarithmis, pro Tomolog. 2 summa, F, additum fuit cum prædictis Res. Log. eiusdem summa, F, & in facta summa unitas tantum deleta est. Habito arcu adiunctiuo, I, I, adiunctus est semidistantia, H, & provenit arcus po-

sitionis, K, cuius Log. iunctus cum Mes. elevationis poli in extra superius dicta dedit (dempta Unitate &c.) circulum positionis, M. Quem an rectè se habeat sic experior. In triangulo rectangulo, G F H, fig. 28 ex dato crure, F H, & angulo opposito, F G H, qui est comp. elevationis poli, E, super circulum positionis, B G D, inuenitur, F G, crur reliquum, nempe differentia ascensionalis puncti, H, in hoc circulo positionis, per Reg. 10 Epilogi pro sphericis rectangulis, addendo Mes. 2 anguli, F G H, hoc est Mes. circuli positionis inueni cum Mesel. H F, declinationis, & sit Log. ipsius, G F, differentia ascensionalis, nempe Log. N, quam voco probam, quia addita ipsorum, I, H, minori, I, debet ipsam, H, restituere cum bene operatum est: sicut, I, demptus ex, H, daret ipsam, N, differentiam ascensionalem: compositur enim distantia, A F, ex arcu positionis, A G, maiori, & G F, differentia ascensionalis minori, & hoc cum, C D, superat, F H, unde sicut arcus adiunctiuus additus semidistantia componit arcum positionis, A G, ita demptus debet dare differentiam ascensionalem, G F, & ideo contra differentia ascensionalis, G F, & arcus adiunctiuus debent restituere semidistantiam. Cum verò, C D, minor est, F H, etiam arcus positionis minor est differentia ascensionalis, & ideo arcus, qui erat adiunctiuus sit subtrahendus, hoc est debet subtrahi ex semidistantia, ut veniat arcus positionis, & debet eidem addi, ut veniat differentia ascensionalis, ergo simul addentes, I, H, si veniet, N, differentia ascensionalis in hoc secundo casu rectè se habebit operario, licet Directiones in isto casu non sint in usu. Res simili modo in cæteris casibus procedit. Vide nunc dictam calculi formam.

In fig. 28.

Per Logarith.

		gr. 70.35		
A	Ascensio recta Solis Sept. sept.	70. 6		Calculus pro inveniendi Circulo positionis Solis.
B	Ascensio recta Medij Cæli	7. 6		
C	Distantia à Medio Cæli, A F,	63. 29		
D	Comp. elevationis Poli, C D,	46. 0		
E	Declinatio Solis sept. F H,	22. 20	m	961364
F	Summa ipsorum, E, D,	68. 20	r l	003182
G	Differentia eorundem	23. 40	l	960350
H	Semidistantia à Medio Cæli	31. 44	m	979128
I	Arcus adiunctiuus ipsi, H,	14. 57	m	942669
K	Arcus positionis à Medio Cæli, A G,	46. 41	l	986188
L	Elevatio poli	44. 0	m	998484
M	Circulus positionis quæsitus, E O,	35. 6	m	984672
N	Probam, id est Differentia ascensionalis, G F,	16. 47	l	946036

Noran-

Notandum verò est omnia præcedentia Problemata circa spherica triangula etiam in Globo aliquantisper solui posse, necnon spe solius Circuli in Planisphærio, ut docet Pater Clavius in suo Astrolabio Lib. 3, Canone 22, seu per Carcinum geometricum Galilei, & alijs quoque modis, quos brevitatis causa, & quia non adeo exacta, ac per numeros euadit operatio, hic prætermitto.

Notandum deniq; est generaliter circa Logarithmos in vtrâq; Trigonometria exercendos, quod absq; respectu ad particulares eorundem Regulas, poterit calculator hoc Præceptum generale firmiter memoriæ mādare. Vbiunque nempe duo quatuor numeri siue absoluti, siue relativi, hoc est Si. Ta. Sec. &c. præcipiuntur multiplicandi, huius vice eorum Logarithmi addentur, & summa, seu Logarithmus proueniens dabit in Tabula idem productum, quod ex multiplicatione haberetur. Cum verò vnus datorum numerorum per alium erit diuidendus, subtrahes Logarithmum diuisoris ex Logarithmo diuidendi, & reliquus erit Logarithmus dans in Tabula quotientem. Hoc enim proprium est Logarithmorum ut con-

uertant multiplicationem in additionem, & diuisionem in subtractionem, sicuti Num. 25 prælod. Trigonometria Planæ dicebatur. Quinimmo cuiuscunque numeri bipartito Logarithmo, factum dimidium, ut Logarithmus dabit in Tabula, præcipue in Chiade, radicem quadratam eiusdem. Eoq; tripartito, tertia pars ut Logarithmus dabit radicem cubicam. Ut in meæ Centuriæ Probl. 87 pro his, ac aliarum post cubum sequentium dignitatum Cossicarum radicibus inueniendis exemplo declarauit.

Sequitur Epilogus Regularum tam Trigonometria planæ, quam spherica, quibus & per Lineas, & per Logarithmos poterit quisq; operari. Cum verò idem quæsitum multipliciter, ut ex antecedentibus patet, haberi possit, selectiores, ac faciliores in eo modos, seu Regulas exendere curauit, ut prumptius, ac facilius quam fieri possit, quoscunque calculos absolvere, ac nobilissimæ huius Artis summos apices, nullis remotis, aut ambagibus detentus, benigne Lector, attingere possis. Si tamen varietate delictaris, plures modi, quos tradidi nequaquam erunt tibi negligendi: eos verò ex Indice Problematum suis locis poteris peruenire.

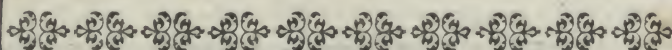
Finis Trigonometriæ Sphericæ.



EPILOGVS

Regularum vniuersę Trigonometrię,
tam per Lineas, quam per
Logarithmos.

A Ntequam verò calculator vtatur infraſcriptis Regulis, videat ſaltem Definitiones vtriuſque Trigonometrię, ac priora quinque Problemata Trigonom. planę. Quod ſi recurrerit quoque ad ipſa Problemata, quę infra citantur in ipſis Regulis, & plures habebit modos propoſitum quaſitum inueniendi; & calculorum formas, quibus harum Regularum vſum faciliorem ſibi comparabit.



In Triangulis Planis Rectangulis
vt inuenias

**I. Ex data hypotenufa, & altero acutorum (ex quo reli-
quus quoque ſcitur) Crus quodcunque. Proble-
ma 7.**

Pag. 14.

Fac vt Radius 100000, vel plurium, aut pauciorum pro libito ciphitarum, ad hypotenufam datam in pedibus, vel vlnis &c. ita Sinum anguli acuti dati quaſito cruri oppoſiti, quem ex Canone habebis, ad crus quaſitum, ac notificatum in pedibus, vel vlnis &c.

Vel Log. hypotenufa data, iunge cum Log. anguli acuti dati quaſito cruri oppoſiti: & fiet (dempta Vnitare &c.) Log. cruris quaſiti.

Vide huius Regula duo Exempla, duoſq; calculos pagina 14. Sicuti pro ſub ſequentibus Regulis habebis Exempla, & calculorum formas in paginis, qua e regione ipſarum in margine infra citantur, ubi eas videre poteris, & ad eorū normam operari.

II. Ex data hypotenufa, & altero crurum: Angulos acutos, & ſubinde reliquum crus per primam. Prob. 8.

Pag. 16.

Fac vt hypotenufa data, ad Radium: ita crus datum, ad Sinum anguli quaſiti dato cruri oppoſiti.

Vel Ref. Log. hypotenufa, iunge Logarithmo cruris dati: & fiet (dempta Vnitare &c.) Log. anguli quaſiti dato cruri oppoſiti.

III. Ex

III. **E**x dato crure, & altero acutorum (ex quo reliquus quoque scitur) Hypotenusam. Prob. 7.

Pag. 15.

FAc vt Radius, ad crus datum: ita Secantem dati acuti cruri dato adiacentis, ad hypotenusam quaesitam.

VEl Log. cruris dati, iunge Tomologarithmo dati acuti cruri dato adiacentis: & fiet (dempta Vnitate &c.) Log. hypotenusae quaesitae.

Pag. 15.

IV. **E**x dato crure, & altero acutorum (ex quo reliquus quoque scitur) Crus reliquum. Prob. 7.

FAc vt Radius, ad crus datum: ita Tangentem dati acuti cruri dato adiacentis, ad crus reliquum quaesitum.

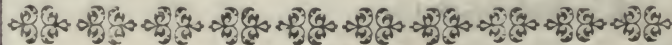
VEl Log. cruris dati, iunge Mes. dati acuti cruri dato adiacentis: & fiet (dempta Vnitate &c.) Log. reliqui cruris quaesiti.

Pag. 16.

V. **E**x datis cruribus: Angulos acutos, & subinde hypotenusam per tertiam. Prob. 8.

FAc vt quoduis datorum crurum, ad Radium: ita crus reliquum datum, ad Tang. acuti quaesiti, eodem reliquo cruri oppositi.

VEl Ref. Log. cuiusvis datorum crurum, iunge Log. reliqui dati cruris: & fiet (dempta Vnitate &c.) Mesol. acuti quaesiti, eidem reliquo cruri oppositi.



In Triangulis Planis Obliquangulis
vt inuenias

Pag. 17.

I. **E**x datis duobus cruribus, & angulo uni opposito, nota specie anguli reliquo datorum oppositi: Angulum reliquo datorum crurum oppositum, & subinde angulum verticalem, & basim per secundam subsequentem. Prob. 9.

FAc vt datum crus dato angulo oppositum, ad Sinum dati anguli oppositi: ita reliquum datum crus quaesito angulo oppositum, ad Sinum anguli quaesiti, ex hypotesi specie noti.

VEl Ref. Log. dati cruris dato angulo oppositi, iunge Log. dati anguli oppositi, vna cum Log. reliqui dati cruris quaesito angulo oppositi: & fiet (dempto Binario &c.) Log. anguli quaesiti, ex hypotesi specie noti.

II. EX datis duobus angulis, & crure uni opposito: Crus
reliquo datorum oppositum, & subinde angulum
verticalem, & basim. *Prob. 10.*

Pag. 18.

FAc ut Sinus dati anguli dato cruri op-
positi, ad ipsum datum crus opposi-
tum: ita Sinum reliqui anguli dati, ad re-
liquum crus quaesitum.

VEl Tomolog. 2 dati anguli dato cruri op-
positi, iunge Logar. dati cruris oppositi,
una cum Logar. reliqui anguli dati: & fiet
(dempto Binario &c.) Log. cruris quaesiti.

Recordare
autem cum
est sumendus
Tom. gradus
supra 90, &
infra 180 su-
mendum esse
Tom. supple-
menti eorum-
dem graduum,
vel Tom. 2
excessus supra
90. Et pro
Tom. 2 gra-
dum supra
90, accipien-
dum esse Tom.
excessus supra
gr. 90: ut in
Probl. primo
natura circa
Tom. sed &
circa reliquos
Loga ichmos,
& Lineas di-
cebat.

III. EX datis cruribus, & angulo verticali: Angulos ad
basim, & subinde etiam ipsam basim per secun-
dam antecedentem. *Pr b. 11, & 12.*

Pag. 19.

FAc ut aggregatum datorum crurum, ad
eorum differentiam: ita Tangentem
datae semisummae angulorum ad basim, ad
Tangentem differentiae infra, vel supra ean-
dem semisummae. Hanc inuentam diffe-
rentiam adde semisummae, & fiet angulus
maior, deme, & fiet angulus minor.

VEl Ref. Logar. aggregati datorum cru-
rum, iunge Log. eorundem differentia,
una cum Ref. datae semisummae angulorum:
ad basim: & fiet (dempto Binario &c.) Ref.
differentiae infra, vel supra eandem semisum-
mam. Hanc inuentam differentiam adde se-
misummae, & fiet angulus maior, deme, & fiet
angulus minor.

IV. EX datis tribus lateribus: Angulum quemuis.
Prob. 13, & 14.

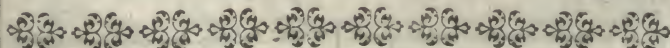
Pag. 22.

FAc ut datum latus maximum, ad sum-
mam reliquorum datorum laterum:
ita ipsorum differentiam, ad segmentum
lateris maximi, quo dempto, in reliqui di-
midium perpendicularum cadit.

VEl Ref. Log. dati lateris maximi, iunge
Log. summa reliquorum datorum late-
rum, una cum Log. differentia eorundem: &
fiet (dempto Binario &c.) Log. segmenti la-
teris maximi superius dicti.

Inuentum segmentum adde dimidio re-
liqui lateris maximi, fietque crus trian-
guli rectanguli, in quo per Secundam Re-
ctangulorum angulos acutos notificabis. Et
hoc idem efficies in altero triangulo re-
ctangulo a perpendicularo constituto, ex quo
singulos propositi trianguli obliquanguli
angulos obtinebis.

NOra autem in omnibus praefatis Regulis
Ref. Log. sumendum esse ad duplum
Logarith. Radij, nempe ad 2000000, vel
20000000 &c. ut in Probl. 5 Trigon. plane
praemonitum est.



In Triangulis Sphæricis Rectangulis
vt inuenias

Pag. 33.
Ad huius
normam cal-
culos subse-
quentium 16
Regularum
extendere po-
teris, omnes
enim huius
miles erunt,
excepta nomi-
num mutatio-
ne pro ipsarū
Regularum
varietate.

I. **E**x data hypotenusa, & angulo adiacente: Crus dato angulo oppositum. Vide Prob. 1 in quo hæc 16 Regula unico Exemplo huic primæ Regula applicato dilucidantur.

Fac vt Radius, ad Sinum anguli dati: ita Sinum datæ hypotenuse, ad Sinum cruris quaesiti, angulo dato oppositi, eique specie conformis.

Vel Log. anguli dati iunge cum Log. hypotenuse: & fiet (dempta Vnitate &c.) Log. cruris quaesiti, angulo dato oppositi, eique specie conformis.

II. **E**x data hypotenusa, & angulo adiacente quadrante minoribus: Crus dato angulo adiacens.

Fac vt Radius, ad Secantem anguli dati: ita Tang. 2 datæ hypotenuse, ad Tang. 2 cruris quaesiti, angulo dato adiacentis, quadrante minoris.

Vel Tomolog. anguli dati, iunge Mes. 2 hypotenuse datæ: & fiet (dempta Vnitate &c.) Mesol. 2 cruris quaesiti, angulo dato adiacentis acuti.

III. **E**x data hypotenusa, & angulo adiacente quadrante minoribus: Angulum reliquum obliquum.

Fac vt Radius ad Sinum 2 hypotenuse datæ: ita Tang. anguli dati, ad Tang. 2 anguli reliqui quaesiti, quadrante minoris.

Vel Log. 2 hypotenuse datæ, iunge Mes. anguli dati: & fiet (dempta Vnitate &c.) Mes. 2 anguli reliqui quaesiti acuti.

IV. **E**x data hypotenusa, & altero crurum: Angulum dato cruri oppositum.

Fac vt Radius, ad Secantem 2 hypotenuse datæ: ita Sinum dati cruris, ad Sinum anguli eidem oppositi quaesiti, specie conformis dato cruri.

Vel Tomolog. 2 hypotenuse datæ, iunge Log. dati cruris: & fiet (dempta Vnitate &c.) Log. anguli eidem oppositi quaesiti, specie conformis dato cruri.

V. Ex data hypotenusa, & altero crurum quadrante minoribus: Angulum dato cruri adiacentem.

FAc vt Radius, ad Tangentem dati cruris: ita Tang. 2 hypotenuse datae, ad Sinum 2 anguli quaesiti, dato cruri adiacentis, acuti.

VEl Mef. dati cruris, iunge Mef. 2 hypotenuse datae: & fiet (dempta Vnitare &c.) Log. 2 anguli quaesiti dato cruri adiacentis, acuti.

VI. Ex data hypotenusa, & altero crurum quadrante minoribus: Crus reliquum.

FAc vt Radius, ad Sinum 2 cruris dati: ita Secantem hypotenuse datae, ad Secantem reliqui cruris.

VEl Log. 2 cruris dati, iunge Tomolog. hypotenuse datae: & fiet (dempta Vnitate &c.) Tomolog. reliqui cruris.

VII. Ex dato crure, & angulo adiacente quadrante minoribus: Crus reliquum.

FAc vt Radius, ad Sinum dati cruris: ita Tangentem anguli dati, ad Tangentem reliqui cruris quaesiti.

VEl Log. dati cruris, iunge Mef. anguli dati: & fiet (dempta Vnitate &c.) Mef. reliqui cruris quaesiti.

VIII. Ex dato crure, & angulo adiacente: Angulum dato cruri oppositum.

FAc vt Radius, ad Sinum anguli dati: ita Sinum 2 cruris dati, ad Sinum 2 reliqui anguli quaesiti, dato cruri specie conformis.

VEl Log. anguli dati, iunge Log. 2 cruris dati: & fiet (dempta Vnitate &c.) Log. 2 reliqui anguli quaesiti, dato cruri specie conformis.

IX. Ex dato crure, & angulo adiacente quadrante minoribus: Hypotenusam.

FAc vt Radius, ad Sin. 2 anguli dati: ita Tang. 2 cruris dati, ad Tang. 2 hypotenuse quaesita, quadrante minoris.

VEl Log. 2 anguli dati, iunge Mef. 2 cruris dati: & fiet (dempta Vnitate &c.) Mef. 2 hypotenuse quaesita, quadrante minoris.

X. **E**x dato crure, angulo opposito, ac specie unius obli-
quarum partium reliquarum, singillatim quadrante
minoribus: Crus reliquum.

FAc vt Radius, ad Tang. 2 anguli dati: ita Tangentem dati cruris, ad Sinum
reliqui cruris quæsitæ, quadrante minoris. **V**El Mes. 2 anguli dati, iunge Mes. dati
cruris: & fiet (dempra Vnitate &c.) Log. reliqui cruris quæsitæ, quadrante minoris.

XI. **E**x dato crure, angulo opposito, ac specie unius obli-
quarum partium reliquarum: Hypotenusam.

FAc vt Radius, ad Secantem 2 anguli
dati: ita Sinum dati cruris, ad Sinum
hypotenuse quæsitæ, quæ erit quadrante
minor, cruribus inter se, vel angulis obli-
quis inter se specie concordantibus: & qua-
drante maior, iisdem non concordantibus. **V**El Tomolog. 2 anguli dati, iunge Log.
dati cruris: & fiet (dempra Vnita-
te &c.) Log. hypotenuse quæsitæ, cuius spe-
ciem scies vt supra &c.

XII. **E**x dato crure, angulo opposito, ac specie unius obli-
quarum partium, singillatim quadrante minori-
bus: Angulum reliquum.

FAc vt Radius, ad Secantem dati cruris:
ita Sinum 2 dati anguli, ad Sinum re-
liqui anguli quæsitæ, quadrante minoris. **V**El Tomolog. dati cruris, iunge Logar. 2
dati anguli: & fiet (dempra Vnita-
te &c.) Log. reliqui anguli quæsitæ, quadran-
te minoris.

XIII. **E**x datis cruribus: Hypotenusam.

FAc vt Radius ad Sinum 2 cuiusvis da-
torum crurum: ita Sinum 2 reliqui
dati cruris, ad Sinum 2 hypotenuse quæsi-
tæ, quadrante minoris, si crura specie con-
cordauerint, & quadrante maioris, si non
concordauerint. **V**El iunge simul Logarithmos secundos da-
torum crurum: & fiet (dempra Vni-
tate &c.) Log. 2 hypotenuse quæsitæ, ac spe-
ciem vt dictum est &c.

XIV. **E**x datis cruribus quadrante minoribus: Angu-
lum cuius oppositum.

FAc vt Radius, ad Tangentem dati cru-
ris, quæsitæ angulo oppositi: ita Se-
cantem 2 reliqui dati cruris, ad Tangentem
anguli quæsitæ. **V**El Mes. dati cruris quæsitæ angulo oppo-
siti, iunge Tomolog. 2 reliqui dati cru-
ris: & fiet (dempra Vnitate &c.) Mes. an-
guli quæsitæ.

XV. **E**x datis angulis obliquis quadrante minoribus: Hypotenusam.

FAc ut Radius, ad Tang. 2 cuiusvis datorum angulorum: ita Tang. 2 reliqui dati anguli obliqui, ad Sinum 2 hypotenusa quæ sitz, quadrante minoris.

VEl iunge simul Mesologarithmos secundos datorum angulorum obliquorum: & fiet (dempta Vnitate &c.) Log. 2 hypotenusa quæ sitz, quadrante minoris.

XVI. **E**x datis angulis obliquis: Crur cuius oppositum.

FAc ut Radius, ad Sinum 2 dati anguli quæ sitz cruri oppositi: ita Secantem 2 reliqui dati anguli obliqui, ad Sinum 2 cruris quæ sitz, & opposito angulo specie conformis.

VEl Log. 2 dati anguli quæ sitz cruri oppositi, iunge Tomolog. 2 reliqui dati anguli obliqui: & fiet (dempta Vnitate &c.) Log. 2 cruris quæ sitz, & opposito angulo specie conformis.



In Triangulis Sphæricis Obliquangulis
ut inuenias

I. **E**x datis duobus cruribus, & angulo vni opposito, ac specie anguli reliquo datorum oppositi: Angulum reliquo datorum crurum oppositum. Prob. 2.

Pag. 36.

FAc ut Sinus cruris dato angulo oppositi, ad Sinum dati anguli: ita Sinum reliqui dati cruris, ad Sinum anguli quæ sitz, ex hypotesi specie noti.

VEl Tomolog. 2 cruris dato angulo oppositi, iunge Log. dati anguli, una cu Log. reliqui dati cruris: & fiet (dempto Binario &c.) Log. anguli quæ sitz, ex hypotesi specie noti.

II. **E**x datis cruribus singillatim quadrante minoribus, & angulo vni opposito, ac specie anguli reliquo datorum oppositi: Basim. Prob. 2.

Pag. 36.

Primò fac ut Radius, ad Secantem anguli dati (vel eius supplementi &c.) ita Tang. 2 cruris angulo dato adjacentis, ad Tang. 2 Inuenti primi, quadrante minoris. Secundo fac ut Sinus 2 cruris angulo dato adjacentis, ad Sinum 2 reliqui cruris: ita Sinum 2 Inuenti primi, ad Si. 2 Inuenti secundi, quadrante minoris. Tertiò adde hæc duo Inuenta, cum anguli cruribus oppositi sunt eiusdem speciei: vel deme minus, ex maiori, cum sunt diuersæ speciei, & proueniet basis quæ sita.

VEl primò Tomolog. anguli dati (vel eius supplementi) iunge Mes. 2 cruris angulo dato adjacentis, & fiet (dempta Vnitate &c.) Mes. 2 Inuenti primi, quadrante minoris. Secundo iunge Tomolog. cruris angulo dato adjacentis, cum Log. 2 reliqui cruris, & cum Log. 2 Inuenti primi: & fiet (dempto Binario &c.) Log. 2 Inuenti secundi, quadrante minoris. Tertiò adde, vel deme hac Inuenta, ut supra &c. & proueniet basis quæ sita.

III. Ex

III. **E**x datis cruribus singillatim quadrante minoribus,
& angulo uni opposito, ac specie anguli reliquo
datorum oppositi: Angulum verticalem. Prob. 2.

Pag. 36.

Primò fac vt Radius ad Tangentem an-
guli dati (vel eius supplementi &c.)
ita Sinum 2 cruris dato angulo adiacentis,
ad Tang. 2 Inuenti primi, quadrante mi-
noris.

Secundò fac vt Tangens 2 cruris dato an-
gulo adiacentis, ad Tang. 2 reliqui dati
cruris: ita Sinum 2 Inuenti primi, ad Si-
num 2 Inuenti secundi, quadrante minoris.

Tertiò adde hæc duo Inuenta, cum an-
guli cruribus oppositi fuerint eiusdem spe-
ciei: vel si diuersæ, deme minus ex maiori,
prouenietq; angulus verticalis quaesitus.

Vel primò Mes. anguli dati (aut illius
suppl. &c.) iunge Logar. 2 cruris dato
angulo adiacentis: & fiet (dempta Vnita-
re &c.) Mes. 2 Inuenti primi, quadrante mi-
noris.

Secundò Mes. cruris dato angulo adiacen-
tis, iunge cum Mes. 2 reliqui dati cruris, &
cum Logar. 2 Inuenti primi: & fiet (dempta
Binario &c.) Logar. 2 Inuenti secundi, qua-
drante minoris.

Tertiò adde, vel deme hæc Inuenta, vt su-
pra &c. & proueniet angulus verticalis qua-
situs.

IV. **E**x datis duobus angulis, & crure uni opposito, ac
specie cruris reliquo datorum oppositi: Hoc ip-
sum Crus reliquo angulorum datorum oppositum. Prob. 3.

Pag. 37.

Fac vt Sinus anguli dato cruri oppositi,
ad Sinum ipsius cruris oppositi: ita
sinum reliqui anguli dati, ad Sinum cruris
quaesiti, ex hypotesi specie noti.

Vel Tomolog. 2 anguli dato cruri oppositi,
iunge Log. ipsius cruris oppositi, una-
cum Log. reliqui anguli dati: & fiet (dem-
pto Binario &c.) Log. cruris quaesiti, ex hypo-
thesi specie noti.

V. **E**x datis duobus angulis acutis, & crure uni opposito,
ac specie cruris reliquo datorum oppositi: Basim.
Prob. 3.

vt in pag. 36

Primò fac vt Radius, ad Secantem an-
guli dato cruri adiacentis: ita Tang. 2
eiusdem dati cruris, ad Tang. 2 Inuenti pri-
mi, dato cruri specie conformis.

Secundò fac vt Tangens 2 anguli dato
cruri adiacentis, ad Tang. 2 reliqui anguli
dati: ita Sinum Inuenti primi, ad Sinum
Inuenti secundi, specie conformis cruri
non dato.

Tertiò adde hæc Inuenta, & prodibit ba-
sis quaesita.

Vel primò Tomolog. anguli dato cruri
adiacentis, iunge cum Mes. 2 eiusdem
cruris dati: & fiet (dempta Vnitate &c.)
Mes. 2 Inuenti primi, dato cruri specie confor-
mis.

Secundò iunge Mes. anguli dati, noto cruri
adiacentis, cum Mes. 2 reliqui anguli noti, &
cum Log. Inuenti primi: & fiet (dempto Bi-
nario &c.) Log. Inuenti secundi, specie con-
formis cruri non dato.

Tertiò adde hæc Inuenta, & prodibit basim
quaesita.

VI. EX datis duobus angulis acutis, & crure uni opposito, ac specie cruris reliquo datorum oppositi: Angulum verticalem. *Prob. 3.*

vt in pag. 36.

Primò fac vt Radius, ad Sinum 2 cruris dati: ita Tang. anguli eidem dato cruri adiacentis, ad Tang. 2 Inuenti primi, dato cruri specie conformis.

Secundò fac vt Sinus 2 anguli dato cruri adiacentis, ad Sinum 2 reliqui dati anguli: ita Sinum Inuenti primi, ad Sinum Inuenti secundi, specie conformis cruri non dato.

Tertiò adde hæc Inuenta, & proueniet angulus verticalis quaesitus.

Vel primò Log. 2 cruris dati iunge cum Mes. anguli eidem dato cruri adiacentis: & fiet (dempta Vnitate &c.) Mes. 2 Inuenti primi, dato cruri specie conformis.

Secundò iunge Tomolog. anguli dato cruri adiacentis, cum Log. 2 reliqui dati anguli, & cum Log. Inuenti primi: & fiet (dempto Binario &c.) Log. Inuenti secundi, specie conformis cruri non dato.

Tertiò adde hæc Inuenta, & proueniet angulus verticalis quaesitus.

VII. EX datis cruribus, & angulo verticali: Basim. *Prob. 4.*

Pag. 40.

Primò fac vt Radius, ad Sinum alterius crurum: ita Sinum reliqui cruris, ad Inuentum primum.

Secundò fac vt Radius, ad Inuentum primum: ita Sinum versus anguli verticalis, ad Inuentum secundum.

Tertiò adde Inuentum secundum Sinui verso differentia crurum, & proueniet Sinus versus basis quaesita.

Vel (angulo verticali acuto, & saltem altero crurum existente quadrante minori) primò Tomolog. anguli verticalis, iunge Mes. 2 cruris quadrante minori: & fiet (dempta Vnitate &c.) Mes. 2 Inuenti primi, quadrante minori.

Secundò confer Inuentum primum cum reliquo crure, demendo minus ex maiori, & habebis Inuentum secundum.

Tertiò iunge simul Logar. 2 primò assumpti cruris, cum Tomolog. Inuenti primi, & cum Log. 2 Inuenti secundi: & fiet (dempto Binario &c.) Log. 2 basis, qua in specie cum Inuentu secundo semper concordabit.

VIII. EX datis cruribus semicirculum insimul non excedentibus, & angulo verticali: Angulos reliquos. *Prob. 5.*

Pag. 42 per Logarithmos.

Primò fac vt Sinus 2 semiaggregati crurum, ad Sinum 2 semidifferentia eorundem: ita Tang. 2 semianguli verticalis, ad Tang. semisummae angulorum ad basim.

Secundò fac vt Sinus eiusdem semiaggregati crurum, ad Sinum eorundem semidifferentia: ita Tang. 2 semianguli verticalis, ad Tang. semidifferentia angulorum ad basim.

Tertiò adde inuentam semidifferentiam semisummae, & fiet angulus maior: demendo, & fiet angulus minor quaesitus.

Vel primò iunge simul Tomolog. semiaggregati crurum, cum Log. 2 semidifferentia eorundem, & cum Mes. 2 semianguli verticalis: & fiet (dempto Binario &c.) Mes. semisummae angulorum ad basim.

Secundò iunge simul Tomolog. 2 semiaggregati crurum, cum Logar. eorundem semidifferentia, & cum Mes. 2 semianguli verticalis: & fiet (dempto Binario &c.) Mes. semidifferentia angulorum ad basim.

Tertiò adde inuentam semidifferentiam semisummae, prouenietq; angulus maior: demendo, & fiet angulus minor quaesitus.

IX. EX data basi, & angulis eidem adjacentibus: Angulum verticalem. Prob. 6.

Pag. 44.

Primò fac vt Radius, ad Sinum alterutrius datorum angulorum: ita Sinum reliqui anguli, ad Inuentum primum. Secundo fac vt Radius, ad Inuentum primum: ita Sinum versus basis, ad Inuentum secundum. Tertiò adde Inuentum secundum Sinui verso differentia inter verumuis datorum angulorum, & reliqui supplementum: & fiet Sinus versus anguli verticalis quaesiti.

Vel (basi quadrante minori, & altero saltem datorum angulorum acuto existente) primò Log. 2 hypotense, iunge cum Mes. anguli dati acuti: & fiet (dempro Vnitare &c.) Mes. 2 Inuenti primi, quadrante minoris. Secundo confer Inuentum primum cum reliquo angulo dato, demendo minus ex maiori, & habebis Inuentum secundum. Tertiò iunge simul Log. 2 anguli primò assumpti, cum Tomolog. 2 Inuenti primi, & cum Log. Inuenti secundi: & fiet (dempro Binario &c.) Log. 2 anguli verticalis acuti, nisi cum Inuentum primum erit maius reliquo angulo dato, tunc enim erit obtusus.

X. EX data basi, & angulis eidem adjacentibus, duos tamen rectos non excedentibus: Vtraque crura. Problema 7.

Pag. 47 per Logarithmos.

Primò fac vt Sinus 2 semiaggregati angulorum ad basim, ad Sinum 2 semidifferentia eorundem: ita Tang. semibasis, ad Tang. semisummam crurum. Secundo fac vt Sinus semiaggregati angulorum ad basim, ad Sinum semidifferentia eorundem: ita Tang. semibasis, ad Tang. semidifferentiam crurum. Tertiò adde inuentam semidifferentiam semisummam, & fiet crus maius: demc, & fiet crus minus quaesitum.

Vel Tomolog. semiaggregati angulorum ad basim, iunge cum Log. 2 semidifferentia eorundem, & cum Mes. semibasis: & fiet (dempro Binario &c.) Mes. semisumma crurum. Secundo iunge simul Tomolog. 2 semiaggregati angulorum ad basim, cum Log. semidifferentia eorundem, & cum Mes. semibasis: & fiet (dempro Binario &c.) Mesol. semidifferentia crurum. Tertiò adde inuentam semidifferentiam semisummam, & fiet crus maius: demc, & fiet crus minus quaesitum.

XI. EX datis tribus lateribus, seu ex datis cruribus, & basi: Angulum verticalem. Prob. 8.

Pag. 48 per Lineas, & pag. 51 per Logarithmos.

Primò fac vt Radius, ad Secantem 2 alterutrius crurum: ita Secantem 2 reliqui cruris, ad Inuentum. Secundo fac vt Radius, ad Inuentum: ita differentiam Sinuum verforum basis, & differentia crurum, ad Sinum versus anguli verticalis quaesiti.

Vel Tomologarithmos secundos crurum, iunge simul cum Log. semisumma, & cum Log. semidifferentia basis, & differentia crurum: & fiet (reliquis vltimo loco ad sinistram tantum Vnitare &c.) Logarithmus, cuius dimidium erit Logarith. semianguli verticalis, ex quo integrum angulum verticalem quaesitum obtinebis.

XII. Ex datis tribus angulis, seu ex angulo verticali,
& duobus basi adiacentibus: Ipsam basim.
Probl. 9.

Pag. 53 per
Lineas, &
pag. 53, & 54
per Logari-
thmos.

Primò fac vt Radius, ad Secantem secundam alterutrius angulorum quasi-
tæ basi adiacentium: ita Secantem secundam reliqui eorundem angulorum basi adiacentium, ad Inuentum.

Secundò fac vt Radius ad Inuentum: ita differentiam duorum Sinuum versorum (quorum vnus est anguli verticalis, alter verò differentie inter vnum, quemuis duorum angulorum basi adiacentium, & supplementum reliqui) ad Sinum versum basis quæritur.

Vel Tomologarithmos secundos angulorum basi adiacentium, iunge cum Log. semisumma, & cum Log. semidifferentia supplementi anguli verticalis, & differentia angulorum ad basim: & fiet (relicta ultimo loco ad sinistram tantum Vnitatem) Logarithmus, cuius dimidium erit Logar. 2 semibasis, ex qua integram quæq; basim quæsitam obtinebis.

Cum sequens
spatium vo-
caturum es-
set, idè pau-
ca, qua se-
quantur, for-
tè non inuri-
lia, adiunge-
re volui.

Pag. 58, licet
hic calculus
parumper
variet ab
hac Regula.

XIII. Ex datis cruribus singillatim quadrante minori-
bus, & angulo verticali (ducto à vertice super
basim perpendicularo) Vtrumq; angulorum ipsi perpendicu-
lo adiacentium vno actu notificare. *Probl. 10.*

Fac vt Sinus aggregati crurum, ad Sinum differentie eorundem: ita Tangentem 2 semianguli verticalis, ad Tangentem anguli: quem adde semiangulo verticali, & fiet angulus maior: deme minorem ex maiori, & fiet angulus minor. Maior autem erit adiacens cruri maiori, & minor, adiacens minori.

Vel Tomolog. 2 aggregati crurum, iunge Log. differentia eorundem, vna cum Mes. 2 semianguli verticalis: & fiet Mes. anguli: quem adde semiangulo verticali, & fiet angulus maior: deme minorem ex maiori, & fiet angulus minor.

XIV. Ex datis duobus angulis acutis basi adiacentibus,
& ipsa basi (ducto super ipsam à vertice per-
pendicularo) Vtrumq; Casum vno actu inuenire.

Hac per trian-
gulum reci-
procum ex su-
periori dedu-
cta est.

Fac vt Sinus aggregati datorum angulo-
rum, ad Sinum differentie eorundem: ita Tangentem semibasis, ad Tangentem arcus, quem adde semibasi, & constitues casum maiorem: deme minorem ex maiori, & efficies casum minorem. Maior autem casus erit adiacens angulo minori dato, & minor, adiacens maiori.

Vel Tomolog. 2 aggregati datorum angulorum, iunge Logar. differentia eorundem, vna cum Mes. semibasis, & fiet Mes. arcus, quem adde semibasi, & constitues casum maiorem, deme minorem ex maiori, & efficies casum minorem.

Notan-

Notandum verò est per Regulam 13. superiorem posse quoque angulos ad basim disiunctim, necnon ipsam basim inueniri. Vt ex. gr. in fig. 25. datis cruribus, SZ, ZP , singillatim quadrante minoribus, & angulo, Z , verticali, & inuentis per eam ut supra vno actu angulis, SZA, AZP ; postmodum ex nota hypot. SZ , & angulo adiacente, SZA , per Reg. 3. Rectangulorum notificabimus, ZSA : sicuti per eandem ex, ZP , & angulo, PZA , notificabimus, ZPA . Pariter per Reg. 1. eorundem Rectangulorum ex, SZ, SZA , fiet notus casus, SA : & ex, ZP, AZP , casus, AP ; unde, SA, AP , simul iunctis, fiet nota ipsa basis, SP . Nec aliter procedemus circa triangulum, SZB . Per Reg. 14. verò ex datis duobus angulis basi adiacentibus acutis, & ipsa basi, ut in eadem fig. 25. ex angulis, ZSP, ZPS , & basi, SP , datis notificabuntur necdum utriusque casus, SA, AP , vno actu,

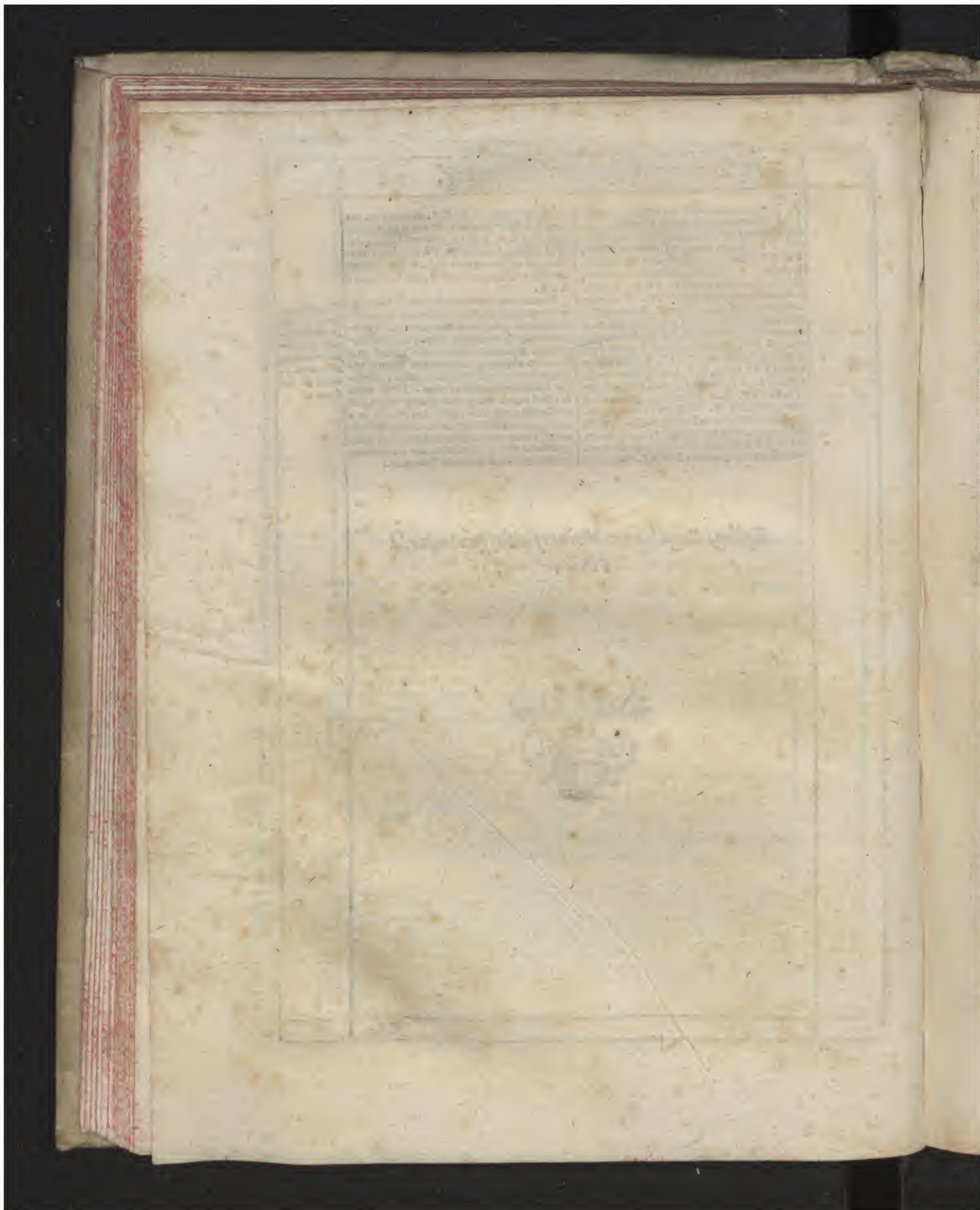
sed & ipsa crura, SZ, ZP , disiunctim, per Reg. 9. Rectangulorum: & per Reg. 8. utriusque anguli, SZA, AZP , quorum summa dabit angulum verticalem, SZP : sicuti differentia angulorum, SZA, BZA , daret angulum verticalem, SZB , pro triangulo, ZSB .

Notandum denique est, cum sit idem Sinus aggregati complementorum crurum singillatim quadrante minorum, & aggregati eorundem crurum (hæc enim duo aggregata æquantur semicirculo) ideo in Prob. 10. vbi cumque usurpauimus Sinum aggregati complementorum crurum, substitue Sinum aggregati crurum. Licet enim & illud verum sit, melius tamen est, si hoc modo illa proportio explicetur, sicuti in duabus proximis Regulis eandem adhibuimus. Parce verò, benigne Lector, si tunc rem hanc non animaduertim, etenim quandoque bonus dormitat Homerus,

Sic eadem quoque est differentia crurum, & complementorum eorundem, unde & idem Sinus.

Epilogi Regularum Vniuersæ Trigonometriæ
Finis.





CANON DVPLEX
TRIGONOMETRICVS

Seu

Tabula Sinuum, Tangentium, & Secantium ad
Radium 10000000:

Et eorundem Logarithmorum, ad Radij Logarithmum
10,0000000.

Cum adiecta in fine Chiliade Numerorum absolutorum ab
Vnitate vsq; ad 1000, & eorum Logarithmis,
ac differentijs.

O	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0.0	0	0	100000.00	0	0	1000000.00
10	4.85	4.85	100000.00	568557.49	568557.49	1000000.00
20	9.70	9.70	100000.00	598660.49	598660.49	1000000.00
30	14.54	14.54	100000.00	616269.61	616269.61	1000000.00
40	19.39	19.39	100000.00	628763.49	628763.49	1000000.00
50	24.24	24.24	100000.00	638454.49	638454.49	1000000.00
1.0	29.09	29.09	100000.00	646372.61	646372.61	1000000.00
10	33.94	33.94	100000.01	653067.29	653067.29	1000000.00
20	38.79	38.79	100000.01	658866.48	658866.48	1000000.00
30	43.63	43.63	100000.01	663981.73	663981.73	1000000.00
40	48.48	48.48	100000.01	668557.49	668557.49	1000000.01
50	53.33	53.33	100000.01	672696.75	672696.75	1000000.01
2.0	58.18	58.18	100000.02	676475.61	676475.61	1000000.01
10	63.03	63.03	100000.02	679951.82	679951.82	1000000.01
20	67.87	67.87	100000.02	683170.29	683170.30	1000000.01
30	72.72	72.72	100000.03	686166.60	686166.61	1000000.01
40	77.57	77.57	100000.03	688969.48	688969.49	1000000.01
50	82.42	82.42	100000.03	691602.37	691602.39	1000000.01
3.0	87.27	87.27	100000.04	694084.73	694084.75	1000000.02
10	92.11	92.11	100000.04	696432.84	696432.86	1000000.02
20	96.96	96.96	100000.05	698660.48	698660.50	1000000.02
30	101.81	101.81	100000.05	700779.41	700779.43	1000000.02
40	106.66	106.66	100000.06	702799.74	702799.76	1000000.02
50	111.51	111.51	100000.06	704730.25	704730.28	1000000.03
4.0	116.36	116.36	100000.07	706578.60	706578.63	1000000.03
10	121.22	121.22	100000.07	708351.47	708351.50	1000000.03
20	126.05	126.05	100000.08	710054.81	710054.85	1000000.04
30	130.90	130.90	100000.09	711693.85	711693.89	1000000.04
40	135.75	135.75	100000.09	713273.28	713273.32	1000000.04
50	140.60	140.60	100000.10	714797.27	714797.31	1000000.04
5.0	145.44	145.44	100000.11	716269.60	716269.65	1000000.05
10	150.29	150.29	100000.11	717693.64	717693.69	1000000.05
20	155.14	155.14	100000.12	719072.46	719072.51	1000000.05
30	159.99	159.99	100000.13	720408.86	720408.92	1000000.06
40	164.84	164.84	100000.14	721705.35	721705.41	1000000.06
50	169.68	169.68	100000.14	722964.27	722964.23	1000000.06
6.0	174.53	174.53	100000.15	724187.71	724187.78	1000000.07
10	179.38	179.38	100000.16	725377.63	725377.70	1000000.07
20	184.23	184.23	100000.17	726535.82	726535.80	1000000.07
30	189.08	189.08	100000.18	727663.52	727664.00	1000000.08
40	193.93	193.93	100000.19	728763.46	728763.54	1000000.08
50	198.77	198.77	100000.20	729835.84	729835.01	1000000.09
7.0	203.62	203.62	100000.21	730882.39	730882.48	1000000.09
10	208.47	208.47	100000.22	731904.29	731904.38	1000000.09
20	213.32	213.32	100000.23	732902.72	732902.82	1000000.10
30	218.17	218.17	100000.24	733878.70	733878.80	1000000.10
40	223.01	223.01	100000.25	734833.23	734833.34	1000000.11
50	227.86	227.86	100000.26	735767.21	735767.34	1000000.11
8.0	232.71	232.71	100000.27	736681.57	736681.69	1000000.12
10	237.56	237.56	100000.28	737577.35	737577.47	1000000.12
20	242.41	242.41	100000.29	738454.44	738454.57	1000000.13
30	247.25	247.25	100000.31	739314.40	739314.59	1000000.13
40	252.10	252.10	100000.32	740157.77	740157.90	1000000.14
50	256.95	256.95	100000.33	740985.02	740985.16	1000000.14
9.0	261.80	261.80	100000.34	741796.81	741796.96	1000000.15
10	266.65	266.65	100000.36	742593.70	742593.86	1000000.16
20	271.50	271.50	100000.37	743376.24	743376.42	1000000.16
30	276.34	276.34	100000.38	744144.91	744145.08	1000000.17
40	281.19	281.19	100000.40	744900.22	744900.39	1000000.17
50	286.04	286.04	100000.41	745642.63	745642.81	1000000.18
10.0	290.89	290.89	100000.42	746372.55	746372.73	1000000.18

Tab. ite		SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
		Infinita.	Infinita.	Infinita.	Infinita.	Infinita.	Infinita.
00.00	60.0	100000.00	2062646703.27	2062646705.75	1000000.00	1431442.51	1431442.51
00.00	50	100000.00	1031324411.66	1031324416.50	1000000.00	1401139.51	1401139.51
00.00	40	100000.00			1000000.00		
00.00	30	100000.00	687549367.35	687549374.04	1000000.00	1383730.39	1383730.39
00.00	20	100000.00	515661932.65	515661942.34	1000000.00	1371236.51	1371236.51
00.00	10	100000.00	412529669.38	412529681.51	1000000.00	1361545.51	1361545.51
00.00	00	100000.00			1000000.00		
00.00	59.0	100000.00	343774672.78	343774687.32	1000000.00	1353627.39	1353627.39
00.00	50	99999.99	294663971.79	294663988.76	1000000.00	1346932.71	1346932.71
00.00	40	99999.99	257831018.26	257831037.65	1000000.00	1341133.52	1341133.52
00.00	30	99999.99	229183103.06	229183124.88	1000000.00	1336018.27	1336018.27
00.00	20	99999.99	206264773.97	206264798.21	999999.99	1331442.51	1331442.51
00.00	10	99999.99	187513450.87	187513477.53	999999.99	1327303.24	1327303.24
00.01	00	99999.98	1718873114.58	171887343.66	999999.99	1323524.38	1323524.39
00.01	50	99999.98	158665225.57	158665257.08	999999.99	1320048.17	1320048.18
00.01	40	99999.98	147331982.14	147332016.03	999999.99	1316829.70	1316829.71
00.01	30	99999.97	137509857.48	137509893.84	999999.99	1313833.39	1313833.40
00.01	20	99999.97	128915480.03	128915518.52	999999.99	1311030.51	1311030.52
00.01	10	99999.97	121332206.29	121332247.49	999999.98	1308397.61	1308397.63
00.02	00	99999.96	114591531.93	114591575.57	999999.98	1305915.25	1305915.27
00.02	50	99999.96	108560389.37	108560435.43	999999.98	1303567.14	1303567.16
00.02	40	99999.95	103132371.90	103132420.38	999999.98	1301339.50	1301339.52
00.02	30	99999.94	98221307.62	98221358.53	999999.98	1299220.57	1299220.59
00.02	20	99999.94	93756694.23	93756747.50	999999.98	1297200.24	1297200.26
00.02	10	99999.94	89680316.23	89680371.98	999999.97	1295269.72	1295269.75
00.03	00	99999.93	85943688.43	85943686.60	999999.97	1293421.37	1293421.40
00.03	50	99999.93	82505882.51	82505943.11	999999.97	1291648.52	1291648.53
00.03	40	99999.92	79312578.10	79312641.13	999999.96	1289945.15	1289945.19
00.03	30	99999.91	76394327.02	76394392.47	999999.96	1288306.11	1288306.15
00.03	20	99999.91	73665956.45	73666024.32	999999.96	1286726.68	1286726.72
00.03	10	99999.90	71125741.00	71125819.10	999999.96	1285202.69	1285202.73
00.04	00	99999.89	68754888.38	68754901.10	999999.95	1283730.35	1283730.40
00.04	50	99999.88	66536986.20	66537061.34	999999.95	1282306.31	1282306.36
00.04	40	99999.88	64457702.62	64457780.10	999999.95	1280927.49	1280927.54
00.04	30	99999.87	62504432.05	62504512.04	999999.94	1279591.08	1279591.14
00.04	20	99999.86	60666663.41	606666145.83	999999.94	1278294.59	1278294.65
00.04	10	99999.86	58932741.16	58932829.01	999999.94	1277035.67	1277035.73
00.05	00	99999.85	57295720.22	57295807.48	999999.93	1275812.22	1275812.29
00.05	50	99999.84	55747186.94	55747276.63	999999.93	1274622.30	1274622.37
00.05	40	99999.83	54280152.12	54280244.23	999999.93	1273464.11	1273464.18
00.05	30	99999.82	52888349.66	52888444.20	999999.92	1272336.00	1272336.08
00.05	20	99999.81	51566137.16	51566234.12	999999.92	1271236.46	1271236.54
00.05	10	99999.80	50338422.63	50338522.04	999999.91	1270164.07	1270164.16
00.06	00	99999.79	49110601.57	49110703.38	999999.91	1269117.52	1269117.61
00.06	50	99999.78	47968490.53	47968594.77	999999.91	1268095.62	1268095.71
00.06	40	99999.77	46878293.40	46878403.15	999999.90	1267097.18	1267097.28
00.06	30	99999.76	45836551.61	45836660.69	999999.90	1266121.20	1266121.30
00.06	20	99999.75	44840100.62	44840212.13	999999.89	1265166.66	1265166.77
00.06	10	99999.74	43886053.60	43886167.53	999999.89	1264232.66	1264232.77
00.07	00	99999.73	42971756.49	42971872.85	999999.88	1263318.31	1263318.43
00.07	50	99999.72	42094779.29	42094898.06	999999.88	1262422.53	1262422.65
00.07	40	99999.71	41252880.98	41253002.19	999999.87	1261545.43	1261545.56
00.07	30	99999.69	40443996.12	40444121.75	999999.87	1260685.41	1260685.54
00.07	20	99999.68	39666224.41	39666350.46	999999.86	1259842.09	1259842.23
00.07	10	99999.67	38917802.05	38917930.53	999999.86	1259014.84	1259014.98
00.08	00	99999.66	38197098.89	38197229.79	999999.85	1258203.04	1258203.19
00.08	50	99999.64	37502602.97	37502736.29	999999.84	1257406.14	1257406.30
00.08	40	99999.63	36832016.33	36832046.08	999999.84	1256623.60	1256623.76
00.08	30	99999.62	36186715.54	36186853.71	999999.83	1255854.52	1255854.69
00.08	20	99999.60	35562804.46	35562945.06	999999.83	1255099.61	1255099.78
00.08	10	99999.59	34960041.52	34960184.55	999999.82	1254357.19	1254357.37
00.08	00	99999.58	34377370.56	34377516.00	999999.82	1253627.27	1253627.45

°	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologarith. pro Tangente	Tomologarith. pro Secante
10.0	290.89	290.89	100000.42	746372.55	746372.73	1000000.18
10	295.74	295.74	100000.44	747090.40	747090.59	1000000.19
20	300.58	300.59	100000.45	747796.59	747796.79	1000000.20
30	305.43	305.43	100000.47	748491.47	748491.67	1000000.20
40	310.28	310.28	100000.48	749175.41	749175.62	1000000.21
50	315.13	315.13	100000.50	749848.75	749848.07	1000000.22
11.0	319.98	319.98	100000.51	750511.81	750512.03	1000000.22
10	324.82	324.83	100000.53	751164.89	751165.12	1000000.23
20	329.67	329.67	100000.54	751808.30	751808.54	1000000.24
30	334.52	334.52	100000.56	752442.31	752442.55	1000000.24
40	339.37	339.37	100000.58	753067.20	753067.45	1000000.25
50	344.22	344.22	100000.59	753683.23	753683.49	1000000.26
12.0	349.07	349.07	100000.61	754290.65	754290.91	1000000.26
10	353.91	353.92	100000.63	754889.28	754889.55	1000000.27
20	358.76	358.76	100000.64	755480.56	755480.84	1000000.28
30	363.61	363.61	100000.66	756063.51	756063.80	1000000.29
40	368.46	368.46	100000.68	756638.75	756639.05	1000000.30
50	373.31	373.31	100000.70	757206.45	757206.75	1000000.30
13.0	378.15	378.16	100000.72	757766.84	757767.15	1000000.31
10	383.00	383.00	100000.73	758320.09	758320.41	1000000.32
20	387.85	387.85	100000.75	758866.37	758866.70	1000000.33
30	392.70	392.70	100000.77	759405.87	759406.21	1000000.34
40	397.55	397.55	100000.79	759938.75	759939.09	1000000.34
50	402.39	402.40	100000.81	760465.18	760465.53	1000000.35
14.0	407.24	407.25	100000.83	760985.30	760985.60	1000000.36
10	412.09	412.09	100000.85	761499.25	761499.58	1000000.37
20	416.94	416.94	100000.87	762007.20	762007.58	1000000.38
30	421.79	421.79	100000.89	762509.28	762509.67	1000000.39
40	426.63	426.64	100000.91	763005.62	763006.02	1000000.40
50	431.48	431.49	100000.93	763496.35	763496.75	1000000.40
15.0	436.33	436.34	100000.95	763981.60	763982.01	1000000.41
10	441.18	441.18	100000.97	764461.48	764461.90	1000000.42
20	446.03	446.03	100000.99	764936.12	764936.55	1000000.43
30	450.88	450.88	100001.02	765405.63	765406.07	1000000.44
40	455.72	455.73	100001.04	765870.12	765870.57	1000000.45
50	460.57	460.58	100001.06	766329.69	766330.15	1000000.46
16.0	465.42	465.42	100001.08	766784.45	766784.92	1000000.47
10	470.27	470.27	100001.11	767234.49	767234.97	1000000.48
20	475.12	475.12	100001.13	767679.91	767680.40	1000000.49
30	479.96	479.97	100001.15	768120.84	768121.34	1000000.50
40	484.81	484.82	100001.18	768557.31	768557.82	1000000.51
50	489.66	489.67	100001.20	768989.45	768989.97	1000000.52
17.0	494.51	494.51	100001.22	769417.33	769417.86	1000000.53
10	499.36	499.36	100001.25	769841.03	769841.57	1000000.54
20	504.20	504.21	100001.27	770260.64	770261.19	1000000.55
30	509.05	509.06	100001.30	770676.23	770676.79	1000000.56
40	513.90	513.91	100001.32	771087.88	771088.45	1000000.57
50	518.75	518.76	100001.35	771495.67	771496.25	1000000.58
18.0	523.60	523.60	100001.37	771899.66	771900.26	1000000.60
10	528.44	528.45	100001.40	772299.93	772300.54	1000000.61
20	533.29	533.30	100001.42	772696.55	772697.17	1000000.62
30	538.14	538.15	100001.45	773089.57	773090.20	1000000.63
40	542.99	543.00	100001.47	773479.07	773479.71	1000000.64
50	547.84	547.84	100001.50	773865.11	773865.76	1000000.65
19.0	552.68	552.69	100001.53	774247.75	774248.41	1000000.66
10	557.53	557.54	100001.55	774627.04	774627.72	1000000.68
20	562.38	562.39	100001.58	775003.05	775003.74	1000000.69
30	567.23	567.24	100001.61	775375.84	775376.54	1000000.70
40	572.08	572.09	100001.64	775745.45	775746.16	1000000.71
50	576.93	576.93	100001.66	776111.94	776112.66	1000000.72
20.0	581.77	581.78	100001.69	776475.37	776476.10	1000000.73

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarithb. pro Tangente	Tomologarithb. pro Secante
18	50.0	99999.58	34377370.56	999999.82	1253627.27	1253627.45
19	50	99999.56	33813804.59	999999.81	1252909.41	1252909.60
20	40	99999.55	33268416.90	999999.80	1252003.21	1252203.41
21	30	99999.53	32740344.07	999999.80	1251508.33	1251508.53
22	20	99999.52	32228772.35	999999.79	1250824.38	1250824.59
23	10	99999.50	31732942.10	999999.78	1250151.03	1250151.25
24	49.0	99999.49	31252137.05	999999.78	1249487.97	1249488.19
25	50	99999.47	30785684.18	999999.77	1248834.88	1248835.11
26	40	99999.46	30332950.40	999999.76	1248191.46	1248191.70
27	30	99999.44	29893333.32	999999.76	1247557.45	1247557.69
28	20	99999.42	29466283.23	999999.75	1246932.55	1246932.80
29	10	99999.41	29051266.75	999999.74	1246316.51	1246316.77
30	48.0	99999.39	28647773.52	999999.74	1245709.09	1245709.35
31	50	99999.37	28255334.81	999999.73	1245110.45	1245110.72
32	40	99999.36	27873503.22	999999.72	1244510.16	1244510.44
33	30	99999.34	27501852.93	999999.71	1243936.20	1243936.49
34	20	99999.32	27139983.55	999999.70	1243360.95	1243361.25
35	10	99999.30	26787512.55	999999.70	1242793.25	1242793.55
36	47.0	99999.28	26444079.88	999999.69	1242232.85	1242233.16
37	50	99999.27	26109533.59	999999.68	1241679.59	1241679.91
38	40	99999.25	25783297.66	999999.67	1241133.30	1241133.63
39	30	99999.23	25464660.15	999999.66	1240593.79	1240594.13
40	20	99999.21	25154112.23	999999.66	1240060.91	1240061.25
41	10	99999.19	24851047.30	999999.65	1239534.47	1239534.82
42	46.0	99999.17	24555198.11	999999.64	1239014.34	1239014.70
43	50	99999.15	24266310.58	999999.63	1238500.38	1238500.75
44	40	99999.13	23984349.69	999999.62	1237992.42	1237992.80
45	30	99999.11	23708457.93	999999.61	1237490.33	1237490.72
46	20	99999.09	23439040.60	999999.60	1236993.98	1236994.38
47	10	99999.07	23175676.95	999999.60	1236503.25	1236503.65
48	45.0	99999.05	22918166.28	999999.59	1236017.99	1236018.40
49	50	99999.03	22666315.09	999999.58	1235538.10	1235538.52
50	40	99999.01	22419938.84	999999.57	1235063.45	1235063.88
51	30	99998.99	22178861.42	999999.56	1234593.93	1234594.37
52	20	99998.96	21942912.72	999999.55	1234129.43	1234129.88
53	10	99998.94	21711931.28	999999.54	1233669.85	1233670.31
54	44.0	99998.92	21485762.34	999999.53	1233215.08	1233215.55
55	50	99998.89	21264256.14	999999.52	1232765.03	1232765.51
56	40	99998.87	21047270.83	999999.51	1232319.60	1232320.09
57	30	99998.85	20834668.99	999999.50	1231878.66	1231879.16
58	20	99998.82	20626319.10	999999.49	1231442.18	1231442.69
59	10	99998.80	20422094.87	999999.48	1231010.03	1231010.55
60	43.0	99998.78	20221874.96	999999.47	1230582.14	1230582.67
61	50	99998.75	20025542.74	999999.46	1230158.43	1230158.97
62	40	99998.73	19832986.46	999999.45	1229738.81	1229739.36
63	30	99998.70	19644097.44	999999.44	1229323.21	1229323.77
64	20	99998.68	19458772.68	999999.43	1228911.55	1228912.12
65	10	99998.65	19276911.86	999999.42	1228501.75	1228502.33
66	42.0	99998.63	19098418.75	999999.40	1228099.74	1228100.34
67	50	99998.60	18923200.67	999999.39	1227699.46	1227700.07
68	40	99998.58	18751168.59	999999.38	1227302.83	1227303.45
69	30	99998.55	18582235.55	999999.37	1226909.80	1226910.43
70	20	99998.53	18416319.71	999999.36	1226520.29	1226520.93
71	10	99998.50	18253340.04	999999.35	1226134.24	1226134.89
72	41.0	99998.47	18093219.91	999999.34	1225751.59	1225752.25
73	50	99998.45	17935884.42	999999.32	1225372.28	1225372.96
74	40	99998.42	17781261.53	999999.31	1224996.26	1224996.95
75	30	99998.39	17629281.70	999999.30	1224623.46	1224624.16
76	20	99998.36	17479877.73	999999.29	1224253.84	1224254.55
77	10	99998.34	17332984.69	999999.28	1223887.34	1223888.06
78	40.0	99998.31	17188540.09	999999.27	1223523.90	1223524.63

O	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
20.0	581.77	581.78	100001.69	776475.37	776476.10	1000000.73
10	586.62	586.63	100001.72	776835.77	776836.52	1000000.75
20	591.47	591.48	100001.75	777193.21	777193.97	1000000.76
30	596.32	596.33	100001.78	777547.74	777548.51	1000000.77
40	601.17	601.18	100001.81	777900.39	777900.13	1000000.79
50	606.01	606.02	100001.84	778248.22	778249.02	1000000.80
21.0	610.86	610.87	100001.87	778594.27	778595.08	1000000.81
10	615.71	615.72	100001.90	778937.58	778938.41	1000000.82
20	620.56	620.57	100001.93	779278.20	779279.04	1000000.84
30	625.41	625.42	100001.96	779616.17	779617.02	1000000.85
40	630.25	630.27	100001.99	779951.53	779952.39	1000000.86
50	635.10	635.11	100002.02	780284.32	780285.20	1000000.88
22.0	639.95	639.96	100002.05	780614.58	780615.47	1000000.89
10	644.80	644.81	100002.08	780942.35	780943.25	1000000.90
20	649.65	649.66	100002.11	781267.66	781268.58	1000000.91
30	654.49	654.51	100002.14	781590.55	781591.48	1000000.93
40	659.34	659.36	100002.17	781911.06	781912.00	1000000.94
50	664.19	664.20	100002.21	782229.22	782230.18	1000000.96
23.0	669.04	669.05	100002.24	782545.07	782546.04	1000000.97
10	673.89	673.90	100002.27	782858.64	782859.62	1000000.98
20	678.73	678.75	100002.30	783168.05	783170.95	1000001.00
30	683.58	683.60	100002.34	783474.06	783480.07	1000001.02
40	688.43	688.45	100002.37	783778.98	783787.01	1000001.03
50	693.28	693.29	100002.40	784090.74	784091.75	1000001.04
24.0	698.13	698.14	100002.44	784399.38	784394.44	1000001.06
10	702.97	702.99	100002.47	784693.93	784695.00	1000001.07
20	707.82	707.84	100002.51	784992.41	784993.50	1000001.09
30	712.67	712.69	100002.54	785288.85	785289.96	1000001.10
40	717.52	717.54	100002.57	785583.28	785584.40	1000001.12
50	722.37	722.38	100002.61	785875.74	785876.87	1000001.13
25.0	727.21	727.23	100002.64	786166.23	786167.38	1000001.15
10	732.06	732.08	100002.68	786454.79	786455.96	1000001.16
20	736.91	736.93	100002.72	786741.45	786742.63	1000001.18
30	741.76	741.78	100002.75	787026.23	787027.43	1000001.19
40	746.61	746.63	100002.79	787309.15	787310.36	1000001.21
50	751.45	751.48	100002.82	787590.25	787591.47	1000001.22
26.0	756.30	756.32	100002.86	787869.53	787870.77	1000001.24
10	761.15	761.17	100002.90	788147.03	788148.29	1000001.26
20	766.00	766.02	100002.93	788422.77	788424.04	1000001.27
30	770.85	770.87	100002.97	788696.77	788698.06	1000001.29
40	775.69	775.72	100003.01	788969.05	788970.36	1000001.31
50	780.54	780.57	100003.05	789239.63	789240.96	1000001.32
27.0	785.39	785.41	100003.08	789508.54	789509.88	1000001.34
10	790.24	790.26	100003.12	789775.79	789777.15	1000001.35
20	795.09	795.11	100003.16	790041.41	790042.78	1000001.37
30	799.93	799.96	100003.20	790305.42	790306.81	1000001.39
40	804.78	804.81	100003.24	790567.83	790569.24	1000001.41
50	809.63	809.66	100003.28	790828.66	790830.08	1000001.42
28.0	814.48	814.50	100003.32	791087.93	791089.37	1000001.44
10	819.33	819.35	100003.36	791345.67	791347.13	1000001.46
20	824.17	824.20	100003.40	791601.88	791603.36	1000001.48
30	829.02	829.05	100003.44	791856.60	791858.09	1000001.49
40	833.87	833.90	100003.48	792109.82	792111.33	1000001.51
50	838.72	838.75	100003.52	792361.59	792363.11	1000001.53
29.0	843.57	843.60	100003.56	792611.90	792613.45	1000001.55
10	848.41	848.44	100003.60	792860.77	792862.33	1000001.56
20	853.26	853.29	100003.64	793108.22	793109.80	1000001.58
30	858.11	858.14	100003.68	793354.28	793355.88	1000001.60
40	862.96	862.99	100003.72	793598.94	793600.56	1000001.62
50	867.81	867.84	100003.77	793842.24	793843.88	1000001.64
30.0	872.65	872.69	100003.81	794084.19	794085.84	1000001.65

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	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meologarith. pro Tangente	Tomologarith. pro Secante
40.0	99998.31	17188540.0	17188830.98	999999.27	1223523.90	1223524.63
50	99998.28	17046482.65	17046775.96	999999.25	1223163.48	1223164.23
60	99998.25	16906754.24	16907040.98	999999.24	1222806.03	1222806.70
70	99998.22	16763297.77	16763595.93	999999.23	1222451.49	1222452.26
80	99998.19	16634058.27	16634358.86	999999.21	1222099.82	1222100.61
90	99998.16	16500382.55	16501285.56	999999.20	1221750.08	1221751.78
100	99998.13	16370013.07	16370324.50	999999.19	1221404.92	1221405.73
110	99998.10	16241118.21	16241426.07	999999.18	1221061.59	1221062.42
120	99998.07	16114231.10	16114541.39	999999.16	1220720.96	1220721.80
130	99998.04	15989311.44	15989624.14	999999.15	1220382.98	1220383.83
140	99998.01	15865313.54	15865628.67	999999.14	1220047.61	1220048.47
150	99997.98	15745103.42	15745510.07	999999.12	1219714.80	1219715.68
160	99997.95	15625408.31	15625828.37	999999.11	1219384.53	1219385.42
170	99997.92	15508417.06	15508739.46	999999.10	1219056.75	1219057.65
180	99997.89	15392670.51	15393004.34	999999.08	1218731.42	1218732.34
190	99997.86	15278656.29	15278983.54	999999.07	1218408.52	1218409.45
200	99997.83	15166310.06	15166639.74	999999.06	1218088.00	1218088.94
210	99997.79	15055603.86	15055935.96	999999.04	1217769.82	1217770.78
220	99997.76	14946502.05	14946836.57	999999.03	1217453.96	1217454.93
230	99997.73	14838969.98	14839306.93	999999.02	1217140.38	1217141.36
240	99997.70	14732074.24	14732331.62	999999.00	1216820.05	1216820.05
250	99997.66	14628481.72	14628823.52	999998.98	1216519.93	1216520.94
260	99997.63	14525461.08	14525805.30	999998.97	1216221.99	1216222.02
270	99997.60	14423881.24	14424227.88	999998.96	1215928.21	1215928.26
280	99997.56	14323712.16	14324061.23	999998.94	1215639.56	1215640.62
290	99997.53	14224924.68	14225276.17	999998.93	1215356.00	1215356.07
300	99997.49	14127490.59	14127844.50	999998.91	1215076.50	1215076.59
310	99997.46	14031381.88	14031738.22	999998.90	1214710.04	1214711.15
320	99997.43	13936572.08	13936930.84	999998.88	1214445.60	1214446.72
330	99997.39	13843034.84	13843396.03	999998.87	1214183.13	1214184.26
340	99997.36	13750744.71	13751108.32	999998.85	1213923.62	1213924.77
350	99997.32	13659676.91	13660042.95	999998.84	1213667.04	1213668.21
360	99997.28	13569807.51	13570175.97	999998.82	1213413.37	1213414.55
370	99997.25	13481112.63	13481483.51	999998.81	1213162.57	1213163.77
380	99997.21	13393569.76	13393943.07	999998.79	1212914.80	1212915.95
390	99997.18	13307156.42	13307532.16	999998.78	1212670.93	1212672.08
400	99997.14	13221850.90	13222229.06	999998.76	1212430.93	1212432.07
410	99997.10	13137632.02	13138012.60	999998.74	1212193.71	1212194.87
420	99997.07	13054470.32	13054862.33	999998.73	1211959.06	1211960.23
430	99997.03	12972372.35	12972757.78	999998.71	1211727.94	1211729.12
440	99997.00	12891201.83	12891579.69	999998.69	1211499.64	1211500.85
450	99996.95	12811128.47	12811508.75	999998.68	1211275.04	1211276.27
460	99996.92	12732133.03	12732526.33	999998.66	1211054.12	1211055.36
470	99996.88	12654019.26	12654414.38	999998.65	1210836.85	1210838.10
480	99996.84	12576807.20	12577204.84	999998.63	1210623.22	1210624.48
490	99996.80	12500603.74	12501003.71	999998.61	1210413.19	1210414.46
500	99996.76	12425322.52	12425724.92	999998.59	1210206.76	1210208.04
510	99996.72	12350016.15	12350416.07	999998.58	1210003.92	1210005.20
520	99996.68	12277395.53	12277802.77	999998.56	1209804.63	1209805.91
530	99996.64	12204745.07	12205154.74	999998.54	1209608.87	1209610.15
540	99996.60	12132044.13	12132451.22	999998.52	1209416.64	1209417.92
550	99996.56	12061093.00	12061507.52	999998.51	1209227.91	1209229.19
560	99996.52	11991861.00	11992278.84	999998.49	1209042.67	1209043.95
570	99996.48	11923541.66	11923961.03	999998.47	1208860.80	1208862.08
580	99996.44	11854018.02	11854439.81	999998.45	1208681.55	1208682.83
590	99996.40	11786277.59	11786701.81	999998.44	1208504.67	1208505.95
600	99996.36	11719306.00	11719733.54	999998.42	1208330.20	1208331.48
610	99996.32	11653092.00	11653521.96	999998.40	1208158.44	1208159.72
620	99996.28	11587622.82	11588054.31	999998.38	1207989.42	1207990.70
630	99996.23	11522884.22	11523318.13	999998.36	1207823.12	1207824.40
640	99996.19	11458865.01	11459301.35	999998.35	1207659.16	1207660.44

O	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
30.0	872.65	872.69	100003.81	794084.19	794085.84	1000001.65
30	887.20	887.23	100003.94	794802.02	794803.73	1000001.71
31.0	901.74	901.78	100004.07	795508.19	795509.96	1000001.77
30	910.29	916.32	100004.20	796203.06	796204.88	1000001.82
32.0	930.83	930.87	100004.33	796886.98	796888.86	1000001.88
30	945.37	945.41	100004.47	797560.30	797562.24	1000001.94
33.0	959.92	959.96	100004.61	798223.34	798225.34	1000002.00
30	974.46	974.51	100004.75	798876.40	798878.46	1000002.06
34.0	989.00	989.05	100004.89	799519.80	799521.92	1000002.12
30	1003.55	1003.60	100005.04	800153.79	800155.98	1000002.19
35.0	1018.09	1018.14	100005.18	800778.67	800780.92	1000002.25
30	1032.63	1032.69	100005.33	801394.67	801396.99	1000002.32
36.0	1047.18	1047.24	100005.48	802002.07	802004.45	1000002.38
30	1061.72	1061.78	100005.64	802601.08	802603.53	1000002.45
37.0	1076.27	1076.33	100005.79	803191.95	803194.47	1000002.52
30	1090.81	1090.87	100005.95	803774.77	803777.35	1000002.58
38.0	1105.35	1105.42	100006.11	804350.09	804352.74	1000002.65
30	1119.90	1119.97	100006.27	804917.78	804920.50	1000002.72
39.0	1134.44	1134.51	100006.44	805478.14	805480.93	1000002.79
30	1148.98	1149.06	100006.60	806031.36	806034.23	1000002.87
40.0	1163.53	1163.61	100006.77	806577.63	806580.57	1000002.94
30	1178.07	1178.15	100006.94	807117.11	807120.13	1000003.02
41.0	1192.61	1192.70	100007.11	807649.97	807653.06	1000003.09
30	1207.16	1207.24	100007.29	808176.37	808179.54	1000003.17
42.0	1221.70	1221.79	100007.46	808696.46	808699.70	1000003.24
30	1236.24	1236.34	100007.64	809210.40	809213.72	1000003.32
43.0	1250.79	1250.88	100007.82	809718.32	809721.72	1000003.40
30	1265.33	1265.43	100008.01	810220.38	810223.86	1000003.48
44.0	1279.87	1279.98	100008.19	810716.69	810720.25	1000003.56
30	1294.42	1294.52	100008.38	811207.40	811211.04	1000003.64
45.0	1308.96	1309.07	100008.57	811692.62	811696.34	1000003.72
30	1323.50	1323.61	100008.76	812172.48	812176.28	1000003.80
46.0	1338.05	1338.17	100008.95	812647.10	812650.99	1000003.89
30	1352.59	1352.71	100009.15	813116.58	813120.55	1000003.97
47.0	1367.13	1367.26	100009.35	813581.04	813585.10	1000004.06
30	1381.68	1381.81	100009.55	814040.59	814044.74	1000004.15
48.0	1396.22	1396.35	100009.75	814495.32	814499.55	1000004.23
30	1410.76	1410.90	100009.95	814945.34	814949.66	1000004.32
49.0	1425.30	1425.45	100010.16	815390.75	815395.16	1000004.41
30	1439.85	1440.00	100010.31	815831.63	815836.13	1000004.50
50.0	1454.39	1454.54	100010.58	816268.08	816272.67	1000004.59
30	1468.93	1469.09	100010.79	816700.18	816704.87	1000004.69
51.0	1483.48	1483.64	100011.01	817128.04	817132.82	1000004.78
30	1498.02	1498.19	100011.22	817551.71	817556.58	1000004.87
52.0	1512.56	1512.73	100011.44	817971.29	817976.26	1000004.97
30	1527.10	1527.28	100011.66	818386.85	818391.92	1000005.07
53.0	1541.65	1541.83	100011.89	818798.48	818803.64	1000005.16
30	1556.19	1556.38	100012.11	819206.23	819211.49	1000005.26
54.0	1570.73	1570.93	100012.34	819610.20	819615.56	1000005.36
30	1585.27	1585.47	100012.57	820010.44	820015.90	1000005.46
55.0	1599.82	1600.02	100012.80	820407.03	820412.59	1000005.56
30	1614.36	1614.57	100013.03	820800.02	820805.68	1000005.66
56.0	1628.90	1629.12	100013.27	821189.49	821195.25	1000005.76
30	1643.44	1643.67	100013.51	821575.50	821581.37	1000005.87
57.0	1657.99	1658.21	100013.75	821958.11	821964.08	1000005.97
30	1672.53	1672.76	100013.99	822337.37	822343.45	1000006.08
58.0	1687.07	1687.31	100014.23	822713.35	822719.53	1000006.18
30	1701.61	1701.86	100014.48	823086.10	823092.39	1000006.29
59.0	1716.16	1716.41	100014.73	823455.68	823462.08	1000006.40
30	1730.70	1730.96	100014.98	823822.14	823828.65	1000006.51
60.0	1745.24	1745.51	100015.23	824185.53	824192.15	1000006.62

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologarith. pro Tangente	Tonologarith. pro Secante
1.65	50.0	99996.19	11458865.01	11459301.35	999998.35	1205914.16
1.71	30	99996.06	11271005.11	11271448.72	999998.29	1205196.27
1.77	29.0	99995.93	11089205.20	11080656.08	999998.23	1204490.04
1.82	30	99995.80	10913176.44	10913693.59	999998.18	1203795.12
1.88	28.0	99995.67	10742648.44	10743113.86	999998.12	1203111.14
1.94	30	99995.53	10577367.31	10577840.00	999998.06	1202437.76
1.00	27.0	99995.39	10417094.44	10417574.41	999998.00	1201774.66
1.06	30	99995.25	10261605.79	10262093.04	999997.94	1201121.54
1.12	26.0	99995.11	10110690.30	10111184.81	999997.88	1200478.08
1.19	30	99994.96	9964148.91	9964657.70	999997.81	1199844.02
1.25	25.0	99994.82	9821794.28	9822303.34	999997.75	1199219.08
1.32	30	99994.67	9683449.48	9683965.81	999997.68	1198603.01
1.38	24.0	99994.52	9548947.53	9549471.14	999997.62	1197995.55
1.45	30	99994.36	9418130.42	9418061.29	999997.55	1197396.47
1.52	23.0	99994.21	9290848.75	9291386.90	999997.48	1196805.53
1.58	30	99994.05	9166361.10	9167506.52	999997.42	1196222.65
1.65	22.0	99993.89	9046333.59	9046886.28	999997.35	1195647.26
1.72	30	99993.73	8928839.11	8929399.07	999997.28	1195079.50
1.75	21.0	99993.57	8814357.15	8814924.39	999997.21	1194519.07
1.87	30	99993.40	8702773.39	8703347.90	999997.13	1193965.77
1.94	20.0	99993.23	8593979.07	8594560.86	999997.06	1193419.43
1.02	30	99993.06	8487870.95	8488460.01	999996.98	1192879.87
1.09	19.0	99992.89	8384350.69	8384947.01	999996.91	1192346.94
1.17	30	99992.71	8283324.80	8283928.40	999996.83	1191820.46
1.24	18.0	99992.54	8184704.14	8185315.01	999996.76	1191300.30
1.32	30	99992.36	8088403.87	8089022.02	999996.68	1190786.28
1.40	17.0	99992.18	7994343.00	7994968.41	999996.60	1190278.28
1.47	30	99991.99	7902444.35	7903077.04	999996.52	1189776.14
1.50	16.0	99991.81	7812634.22	7813274.19	999996.44	1189279.75
1.64	30	99991.62	7724842.13	7725489.38	999996.36	1188788.96
1.72	15.0	99991.43	7639000.91	7639655.42	999996.28	1188303.66
1.80	30	99991.24	7555046.21	7555707.99	999996.20	1187823.72
1.87	14.0	99991.05	7472916.51	7473585.56	999996.11	1187349.01
1.97	30	99990.85	7392522.95	7393192.27	999996.03	1186879.45
1.06	13.0	99990.65	7313899.10	7314582.70	999995.94	1186414.90
1.15	30	99990.45	7236901.02	7237591.60	999995.85	1185955.26
1.23	12.0	99990.25	7161507.03	7162205.18	999995.77	1185500.45
1.31	30	99990.05	7087667.41	7088372.82	999995.68	1185050.34
1.41	11.0	99989.84	7015334.61	7016047.30	999995.59	1184604.84
1.50	30	99989.63	6944462.99	6945182.93	999995.50	1184163.87
1.59	10.0	99989.42	6875008.73	6875735.98	999995.41	1183727.33
1.69	30	99989.21	6806929.63	6807664.10	999995.31	1183295.13
1.78	9.0	99989.00	6740185.41	6740927.19	999995.22	1182867.18
1.87	30	99988.78	6674737.09	6675486.14	999995.13	1182443.42
1.97	8.0	99988.56	6610547.29	6611303.61	999995.03	1182023.74
1.07	30	99988.34	6547510.04	6548343.64	999994.93	1181608.08
1.16	7.0	99988.12	6485800.76	6486571.63	999994.84	1181196.36
1.26	30	99987.91	6425176.13	6425954.28	999994.74	1180788.51
1.36	6.0	99987.66	6365674.12	6366459.54	999994.64	1180384.44
1.46	30	99987.43	6307263.79	6308056.47	999994.54	1179984.10
1.56	5.0	99987.20	6249915.36	6250715.32	999994.44	1179587.41
1.66	30	99986.97	6193600.17	6194407.40	999994.34	1179194.32
1.76	4.0	99986.73	6138290.51	6139105.01	999994.24	1178804.75
1.87	30	99986.49	6083959.71	6084781.49	999994.13	1178418.63
1.97	3.0	99986.25	6030581.98	6031411.03	999994.03	1178035.92
1.08	30	99986.01	5978132.50	5978968.82	999993.92	1177656.55
1.18	2.0	99985.77	5926587.21	5927430.81	999993.82	1177280.47
1.29	30	99985.52	5875922.97	5876773.84	999993.71	1176907.61
1.40	1.0	99985.27	5826117.35	5826975.49	999993.60	1176537.92
1.51	30	99985.02	5777148.75	5778014.14	999993.49	1176171.35
1.62	0.0	99984.77	5728996.19	5729868.86	999993.38	1175807.85

I	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	1745.24	1745.51	100015.23	824185.53	824192.15	1000006.62
1	1774.32	1774.60	100015.74	824903.32	824910.15	1000006.84
2	1803.41	1803.70	100016.26	825609.43	825616.40	1000007.06
3	1832.49	1832.80	100016.79	826304.23	826311.53	1000007.29
4	1861.58	1861.90	100017.33	826988.10	826995.63	1000007.53
5	1890.66	1891.00	100017.88	827661.36	827669.12	1000007.76
6	1919.74	1920.10	100018.43	828324.34	828332.34	1000008.00
7	1948.83	1949.20	100018.99	828977.34	828985.59	1000008.25
8	1977.91	1978.30	100019.56	829620.67	829629.17	1000008.50
9	2006.99	2007.40	100020.14	830254.60	830263.35	1000008.75
10	2036.08	2036.50	100020.73	830879.41	830888.42	1000009.00
11	2065.16	2065.60	100021.33	831495.36	831504.62	1000009.26
12	2094.24	2094.70	100021.94	832102.69	832112.21	1000009.53
13	2123.32	2123.80	100022.55	832701.63	832711.43	1000009.79
14	2152.41	2152.91	100023.17	833292.43	833302.40	1000010.06
15	2181.49	2182.01	100023.80	833875.29	833885.63	1000010.34
16	2210.57	2211.11	100024.44	834450.43	834461.05	1000010.61
17	2239.65	2240.21	100025.09	835018.05	835028.05	1000010.80
18	2268.73	2269.32	100025.75	835578.35	835589.53	1000011.18
19	2297.81	2298.42	100026.41	836131.50	836142.97	1000011.47
20	2326.00	2326.53	100027.08	836677.69	836689.45	1000011.76
21	2355.08	2355.63	100027.76	837217.10	837229.15	1000012.06
22	2385.06	2385.74	100028.45	837749.88	837762.23	1000012.33
23	2414.14	2414.84	100029.15	838276.20	838288.86	1000012.66
24	2443.22	2443.95	100029.86	838796.22	838809.18	1000012.97
25	2472.30	2473.05	100030.58	839310.08	839323.36	1000013.28
26	2501.38	2502.16	100031.30	839817.93	839831.52	1000013.59
27	2530.46	2531.27	100032.03	840319.90	840333.81	1000013.91
28	2559.54	2560.38	100032.77	840816.14	840830.37	1000014.23
29	2588.62	2589.48	100033.52	841306.76	841321.32	1000014.56
30	2617.69	2618.59	100034.28	841791.90	841806.79	1000014.88
31	2646.77	2647.70	100035.05	842271.68	842286.00	1000015.22
32	2675.85	2676.81	100035.82	842746.21	842761.76	1000015.55
33	2704.93	2705.92	100036.60	843215.61	843231.50	1000015.89
34	2734.01	2735.03	100037.39	843679.99	843696.22	1000016.24
35	2763.09	2764.14	100038.19	844139.44	844156.03	1000016.58
36	2792.16	2793.25	100039.00	844594.09	844611.03	1000016.94
37	2821.24	2822.36	100039.82	845044.02	845061.31	1000017.29
38	2850.30	2851.48	100040.65	845489.14	845506.99	1000017.65
39	2879.40	2880.59	100041.48	845930.13	845948.14	1000018.01
40	2908.47	2909.70	100042.32	846366.49	846384.86	1000018.38
41	2937.55	2938.82	100043.17	846798.50	846817.25	1000018.75
42	2966.62	2967.93	100044.03	847226.26	847245.38	1000019.13
43	2995.70	2997.05	100044.90	847649.84	847669.33	1000019.59
44	3024.78	3026.16	100045.78	848060.32	848080.30	1000019.88
45	3053.85	3055.28	100046.67	848484.79	848505.05	1000020.26
46	3082.93	3084.39	100047.56	848896.32	848916.06	1000020.65
47	3112.00	3113.51	100048.46	849302.08	849325.02	1000021.04
48	3141.08	3142.63	100049.37	849707.84	849729.28	1000021.44
49	3170.15	3171.74	100050.29	850107.98	850129.82	1000021.83
50	3199.22	3200.86	100051.22	850504.47	850526.71	1000022.24
51	3228.30	3229.98	100052.15	850897.36	850920.02	1000022.64
52	3257.37	3259.10	100053.09	851286.73	851309.78	1000023.05
53	3286.44	3288.22	100054.05	851672.64	851696.10	1000023.47
54	3315.52	3317.34	100055.01	852055.74	852079.02	1000023.88
55	3344.5	3346.46	100055.98	852434.30	852458.60	1000024.30
56	3373.66	3375.58	100056.04	852810.17	852834.90	1000024.73
57	3402.72	3404.71	100057.95	853182.81	853207.07	1000025.16
58	3431.8	3433.83	100058.94	853552.28	853577.87	1000025.59
59	3460.88	3462.95	100059.94	853918.63	853944.66	1000026.02
60	3489.95	3492.09	100060.95	854281.92	854308.38	1000026.46

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
60	99984.77	5728996.16	5729868.85	999993.38	1175807.85	1175814.47
59	99984.26	5635058.96	5635946.19	999993.16	1175389.85	1175006.68
58	99983.74	5544151.67	5545053.45	999992.94	1174383.51	1174390.57
57	99983.21	5456130.03	5457046.35	999992.71	1173688.47	1173605.76
56	99982.67	5370838.75	5371780.62	999992.47	1173004.37	1173011.90
55	99982.12	5288210.91	5289156.37	999992.24	1172330.88	1172338.64
54	99981.57	5208067.26	5209027.22	999992.00	1171667.66	1171675.66
53	99981.01	5130315.66	5131290.17	999991.75	1171014.41	1171022.66
52	99980.44	5054850.59	5055839.65	999991.50	1170370.83	1170379.33
51	99979.86	4981572.64	4982576.23	999991.25	1169736.65	1169745.40
50	99979.27	4910388.06	4911406.20	999991.00	1169111.58	1169120.59
49	99978.67	4841208.41	4842241.10	999990.74	1168495.38	1168504.64
48	99978.06	4773950.14	4774997.38	999990.47	1167887.79	1167897.31
47	99977.45	4708534.30	4709596.08	999990.21	1167288.57	1167298.37
46	99976.83	4644886.20	4645962.53	999989.94	1166697.51	1166707.57
45	99976.20	4582935.12	4584025.99	999989.66	1166114.37	1166124.71
44	99975.56	4522614.07	4523719.49	999989.39	1165538.95	1165549.57
43	99974.91	4463859.56	4464979.52	999989.11	1164971.05	1164981.95
42	99974.25	4406611.32	4407745.83	999988.82	1164410.47	1164421.65
41	99973.59	4350812.16	4351961.22	999988.53	1163857.03	1163868.50
40	99972.92	4296407.73	4297571.34	999988.24	1163310.55	1163322.31
39	99972.24	4243346.39	4244524.54	999987.94	1162770.85	1162782.90
38	99971.55	4191578.09	4192771.68	999987.64	1162237.77	1162250.12
37	99970.85	4141058.76	4142266.00	999987.34	1161711.14	1161722.80
36	99970.14	4091741.16	4092962.95	999987.03	1161190.82	1161202.78
35	99969.43	4043583.75	4044820.09	999986.72	1160676.64	1160689.92
34	99968.71	3996546.05	3997796.94	999986.41	1160168.48	1160182.07
33	99968.00	3950589.46	3951854.85	999986.10	1159666.19	1159680.10
32	99967.28	3905677.11	3906957.09	999985.77	1159169.63	1159183.86
31	99966.57	3861773.81	3863068.34	999985.44	1158678.68	1158693.24
30	99965.85	3818845.95	3820155.00	999985.12	1158193.21	1158208.30
29	99965.13	3776861.30	3778184.92	999984.78	1157713.10	1157728.32
28	99964.41	3735789.17	3737127.35	999984.45	1157238.24	1157253.79
27	99963.69	3695600.11	3696952.82	999984.11	1156768.50	1156784.39
26	99962.96	3656265.23	3657633.16	999983.76	1156303.78	1156320.01
25	99962.23	3617759.62	3619141.45	999983.42	1155843.97	1155860.56
24	99961.50	3580055.33	3581451.08	999983.06	1155388.97	1155405.91
23	99960.76	3543128.25	3544539.15	999982.71	1154938.69	1154955.08
22	99959.99	3506954.58	3508380.03	999982.35	1154493.01	1154510.66
21	99959.23	3471511.50	3472951.50	999981.99	1154051.86	1154069.87
20	99958.46	3436777.09	3438231.63	999981.62	1153615.14	1153633.51
19	99957.68	3402730.29	3404199.30	999981.25	1153182.75	1153201.00
18	99956.89	3369350.89	3370834.53	999980.88	1152754.62	1152773.74
17	99956.11	3336619.45	3338117.63	999980.50	1152330.67	1152350.16
16	99955.32	3304517.27	3306030.00	999980.12	1151910.80	1151930.68
15	99954.53	3273026.37	3274553.65	999979.74	1151494.95	1151515.21
14	99953.74	3242139.46	3243671.29	999979.35	1151083.04	1151103.68
13	99952.95	3211801.88	3213366.26	999978.96	1150674.98	1150696.02
12	99952.16	3182051.60	3183622.52	999978.56	1150270.72	1150292.16
11	99951.37	3152839.16	3154424.63	999978.17	1149870.18	1149892.02
10	99950.58	3124157.67	3125757.70	999977.76	1149471.29	1149493.53
9	99949.78	3095992.80	3097607.37	999977.36	1149079.99	1149102.64
8	99948.98	3068330.70	3069950.82	999976.95	1148690.22	1148713.27
7	99948.18	3041158.02	3042801.60	999976.53	1148303.90	1148327.36
6	99947.38	3014461.89	3016120.10	999976.12	1147920.98	1147944.86
5	99946.58	2988220.86	2989902.63	999975.70	1147541.40	1147565.70
4	99945.78	2962440.05	2964137.26	999975.27	1147165.10	1147189.83
3	99944.98	2937110.55	2938812.41	999974.84	1146792.03	1146817.17
2	99944.18	2912200.47	2913916.88	999974.41	1146422.13	1146447.72
1	99943.38	2887708.88	2889430.84	999973.98	1146055.14	1146081.37
0	99942.58	2863625.33	2865370.83	999973.54	1145691.62	1145718.08

2	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	3489.95	3492.08	100060.95	854281.02	854308.38	1000026.46
1	3519.02	3521.20	100061.97	854642.18	854669.09	1000026.91
2	3548.09	3550.33	100063.00	854999.48	855026.81	1000027.35
3	3577.16	3579.45	100064.04	855353.86	855381.66	1000027.80
4	3606.23	3608.58	100065.07	855705.36	855733.62	1000028.26
5	3635.30	3637.71	100066.11	856054.04	856082.76	1000028.72
6	3664.37	3666.83	100067.14	856399.94	856429.12	1000029.18
7	3693.44	3695.90	100068.18	856743.10	856772.75	1000029.64
8	3722.51	3724.97	100069.23	857083.57	857113.68	1000030.11
9	3751.58	3754.04	100070.28	857421.39	857451.77	1000030.58
10	3780.65	3783.11	100071.33	857756.60	857787.66	1000031.06
11	3809.71	3812.18	100072.38	858089.23	858120.77	1000031.54
12	3838.78	3841.25	100073.43	858419.33	858451.36	1000032.01
13	3867.85	3870.32	100074.48	858746.94	858779.45	1000032.51
14	3896.91	3899.38	100075.53	859072.09	859105.00	1000033.00
15	3925.98	3928.45	100076.58	859394.83	859428.32	1000033.50
16	3955.05	3957.52	100077.63	859715.17	859749.17	1000033.99
17	3984.11	3987.58	100078.68	860033.17	860067.67	1000034.50
18	4013.18	4016.64	100080.73	860348.86	860383.86	1000035.00
19	4042.24	4045.70	100081.78	860662.26	860697.77	1000035.51
20	4071.31	4074.76	100082.83	860973.41	861009.43	1000036.02
21	4100.37	4103.83	100083.88	861282.35	861318.89	1000036.54
22	4129.44	4132.90	100084.93	861589.10	861626.16	1000037.06
23	4158.50	4161.96	100085.98	861893.69	861931.27	1000037.58
24	4187.57	4191.02	100087.03	862196.16	862234.27	1000038.11
25	4216.63	4219.08	100088.08	862496.53	862535.18	1000038.64
26	4245.69	4248.15	100089.13	862794.84	862834.02	1000039.18
27	4274.75	4277.21	100090.18	863091.11	863130.83	1000039.72
28	4303.82	4306.28	100091.23	863385.37	863425.63	1000040.26
29	4332.88	4335.34	100092.28	863677.64	863718.45	1000040.81
30	4361.94	4364.40	100093.33	863967.96	864009.31	1000041.35
31	4391.00	4393.46	100094.38	864256.34	864298.25	1000041.91
32	4420.06	4422.52	100095.43	864542.82	864585.28	1000042.47
33	4449.12	4451.58	100096.48	864827.42	864870.44	1000043.03
34	4478.18	4480.64	100097.53	865110.16	865153.75	1000043.59
35	4507.24	4509.70	100098.58	865391.07	865435.22	1000044.16
36	4536.30	4538.76	100099.63	865670.17	865714.90	1000044.73
37	4565.36	4567.82	100100.68	865947.48	865992.79	1000045.31
38	4594.42	4596.88	100101.73	866223.03	866268.01	1000045.89
39	4623.47	4625.93	100102.78	866496.84	866543.31	1000046.47
40	4652.53	4654.99	100103.83	866768.93	866815.98	1000047.05
41	4681.59	4684.05	100104.88	867039.32	867086.97	1000047.64
42	4710.64	4713.10	100105.93	867308.04	867356.28	1000048.24
43	4739.70	4742.16	100106.98	867575.10	867623.93	1000048.84
44	4768.76	4771.22	100108.03	867840.52	867880.06	1000049.44
45	4797.81	4800.27	100109.08	868104.33	868154.37	1000050.04
46	4826.87	4829.33	100110.13	868366.54	868417.19	1000050.65
47	4855.92	4858.38	100111.18	868627.19	868678.44	1000051.26
48	4884.98	4887.44	100112.23	868880.25	868938.13	1000051.88
49	4914.03	4916.49	100113.28	869143.79	869196.21	1000052.50
50	4943.09	4945.55	100114.33	869399.80	869452.91	1000053.12
51	4972.14	4974.60	100115.38	869654.31	869708.06	1000053.75
52	5001.19	5003.65	100116.43	869907.34	869961.72	1000054.38
53	5030.24	5032.70	100117.48	870158.89	870211.00	1000055.02
54	5059.29	5061.75	100118.53	870408.00	870464.65	1000055.65
55	5088.35	5090.81	100119.58	870657.66	870713.95	1000056.30
56	5117.40	5119.86	100120.63	870904.00	870961.81	1000056.94
57	5146.45	5148.91	100121.68	871150.73	871208.34	1000057.59
58	5175.50	5177.96	100122.73	871395.20	871453.4	1000058.24
59	5204.55	5207.01	100123.78	871633.20	871697.1	1000058.90
60	5233.60	5236.06	100124.83	871880.02	871933.5	1000059.56

	SINYS	TANGENS	SECANS	Logarithmus pro Sinu	Meologarith. pro Tangente	Tomologarith. pro Secante
60	99939.08	2863625.33	2865370.83	999973.54	1145691.62	1145718.05
59	99938.06	2839939.69	2841699.74	999973.09	1145330.91	1145357.82
58	99937.03	2816642.18	2818416.78	999972.65	1144973.17	1145000.52
57	99935.99	2793723.33	2795512.48	999972.20	1144618.34	1144646.14
56	99934.95	2771173.90	2772977.69	999971.74	1144266.58	1144294.64
55	99933.90	2748385.28	2750803.53	999971.28	1143917.24	1143945.96
54	99932.84	2727148.61	2728581.41	999970.82	1143570.88	1143600.06
53	99931.77	2705655.68	2707503.03	999970.36	1143227.25	1143256.50
52	99930.69	2684498.43	2686360.33	999969.90	1142886.32	1142916.43
51	99929.60	2663669.04	2665545.49	999969.44	1142548.03	1142578.61
50	99928.51	2643159.96	2645050.96	999968.94	1142212.34	1142243.40
49	99927.40	2622963.84	2624869.39	999968.46	1141879.23	1141910.77
48	99926.29	2603073.58	2604993.68	999967.98	1141548.64	1141580.67
47	99925.17	2583482.27	2585416.92	999967.49	1141220.55	1141253.06
46	99924.04	2564183.23	2566132.43	999967.00	1140894.91	1140927.91
45	99922.90	2545169.96	2547133.71	999966.50	1140571.68	1140605.17
44	99921.75	2526436.15	2528414.45	999966.03	1140250.83	1140284.83
43	99920.60	2507975.68	2509968.53	999965.50	1139932.33	1139966.83
42	99919.44	2489782.62	2491750.02	999965.00	1139616.14	1139651.14
41	99918.27	2471851.19	2473873.14	999964.49	1139302.23	1139337.74
40	99917.09	2454175.78	2456212.28	999963.98	1138990.57	1138926.59
39	99915.90	2436750.95	2438802.00	999963.46	1138681.11	1138717.65
38	99914.70	2419571.40	2421637.00	999962.94	1138373.84	1138410.90
37	99913.49	2402631.99	2404712.14	999962.42	1138068.73	1138106.32
36	99912.28	2385927.73	2388022.42	999961.89	1137765.73	1137803.84
35	99911.06	2369453.72	2371562.97	999961.36	1137464.82	1137503.47
34	99909.83	2353205.25	2355329.05	999960.82	1137165.98	1137205.16
33	99908.59	2337177.72	2339316.07	999960.28	1136869.17	1136908.89
32	99907.34	2321366.65	2323519.55	999959.74	1136574.37	1136614.63
31	99906.08	2305767.67	2307935.13	999959.19	1136281.55	1136322.36
30	99904.82	2290376.55	2292558.56	999958.65	1135990.69	1136032.04
29	99903.55	2275189.16	2277385.72	999958.09	1135701.75	1135743.66
28	99902.27	2260201.48	2262412.59	999957.53	1135414.72	1135457.18
27	99900.98	2245409.59	2247635.25	999956.97	1135129.56	1135172.58
26	99899.68	2230800.67	2233049.89	999956.41	1134846.25	1134889.84
25	99898.37	2216398.02	2218652.78	999955.84	1134564.78	1134608.04
24	99897.05	2202171.00	2204440.32	999955.27	1134285.10	1134329.83
23	99895.73	2188125.10	2190408.97	999954.69	1134007.21	1134052.52
22	99894.40	2174256.87	2176555.20	999954.11	1133731.09	1133776.97
21	99893.06	2160562.96	2162875.93	999953.53	1133456.69	1133503.16
20	99891.71	2147040.10	2149367.63	999952.95	1133184.02	1133231.07
19	99890.35	2133685.11	2136027.10	999952.36	1132913.03	1132960.68
18	99888.98	2120494.88	2122851.51	999951.76	1132643.72	1132691.96
17	99887.61	2107466.37	2109837.55	999951.16	1132376.07	1132424.00
16	99886.23	2094506.61	2096882.26	999950.56	1132110.04	1132159.48
15	99884.84	2081682.76	2084123.05	999949.96	1131845.63	1131895.07
14	99883.44	2069032.1.96	2071736.80	999949.35	1131582.81	1131633.46
13	99882.03	2056511.47	2059342.86	999948.74	1131321.56	1131372.82
12	99880.61	2044148.01	2047072.55	999948.12	1131061.87	1131113.75
11	99879.18	2031930.75	2034980.25	999947.50	1130803.71	1130856.21
10	99877.75	2020055.35	2022978.40	999946.88	1130547.09	1130600.20
9	99876.31	2008370.89	2011207.50	999946.25	1130291.95	1130345.69
8	99874.86	1996902.1.95	1999524.11	999945.62	1130038.28	1130092.66
7	99873.40	1985545.0.12	1987975.84	999944.98	1129786.10	1129841.11
6	99871.93	1974220.10	1976560.36	999944.35	1129535.35	1129591.01
5	99870.45	1962920.50	1965275.41	999943.70	1129286.05	1129342.34
4	99868.97	1951658.17	1954018.74	999943.06	1129038.15	1129095.10
3	99867.48	1940513.27	1942788.20	999942.41	1128791.66	1128849.25
2	99865.98	1929492.17	1931681.67	999941.76	1128546.55	1128604.80
1	99864.47	1918572.08	1920697.01	999941.10	1128302.81	1128361.71
0	99862.95	1907713.67	1909732.26	999940.44	1128060.42	1128110.08

3	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
0	5233.60	5240.78	100137.23	871880.02	871939.58	1000059.56
1	5262.64	5269.95	100138.76	872120.40	872180.63	1000060.22
2	5291.69	5299.12	100140.30	872359.46	872420.35	1000060.89
3	5320.74	5328.29	100141.85	872597.21	872658.77	1000061.56
4	5349.79	5357.46	100143.41	872833.66	872895.89	1000062.24
5	5378.83	5386.63	100144.98	873068.82	873131.74	1000062.92
6	5407.88	5415.81	100146.55	873302.72	873366.31	1000063.60
7	5436.93	5444.98	100148.13	873535.35	873599.64	1000064.28
8	5465.97	5474.16	100149.72	873766.75	873831.72	1000064.97
9	5495.02	5503.33	100151.32	873996.91	874062.58	1000065.67
10	5524.00	5532.51	100152.93	874225.86	874292.22	1000066.36
11	5553.11	5561.69	100154.55	874453.60	874520.67	1000067.07
12	5582.15	5590.87	100156.17	874680.15	874747.92	1000067.77
13	5611.19	5620.04	100157.80	874905.53	874974.00	1000068.48
14	5640.24	5649.23	100159.44	875129.73	875198.92	1000069.19
15	5669.28	5678.41	100161.08	875352.78	875423.69	1000069.91
16	5698.32	5707.54	100162.73	875574.60	875645.31	1000070.62
17	5727.36	5736.78	100164.42	875795.21	875866.41	1000071.35
18	5756.40	5765.96	100166.10	876015.12	876087.11	1000072.07
19	5785.44	5795.15	100167.78	876233.66	876306.47	1000072.80
20	5814.48	5824.34	100169.47	876451.11	876524.65	1000073.54
21	5843.52	5853.52	100171.17	876667.47	876741.75	1000074.28
22	5872.56	5882.71	100172.88	876882.75	876957.77	1000075.02
23	5901.60	5911.90	100174.60	877096.97	877172.74	1000075.76
24	5930.64	5941.09	100176.33	877310.14	877386.05	1000076.51
25	5959.67	5970.29	100178.07	877522.26	877599.52	1000077.26
26	5988.71	5999.48	100179.81	877733.34	877811.36	1000078.02
27	6017.75	6028.67	100181.56	877943.40	878022.18	1000078.78
28	6046.78	6057.87	100183.32	878152.44	878231.99	1000079.54
29	6075.82	6087.06	100185.09	878360.48	878440.79	1000080.31
30	6104.85	6116.20	100186.87	878567.53	878648.61	1000081.08
31	6133.89	6145.46	100188.66	878773.59	878855.44	1000081.85
32	6162.92	6174.66	100190.46	878978.67	879061.30	1000082.63
33	6191.96	6203.86	100192.26	879182.78	879266.20	1000083.41
34	6220.99	6233.06	100194.07	879385.94	879470.14	1000084.20
35	6250.02	6262.26	100195.89	879588.14	879673.13	1000084.99
36	6279.05	6291.47	100197.72	879789.41	879875.19	1000085.78
37	6308.08	6320.67	100199.56	879990.74	880076.32	1000086.58
38	6337.11	6349.88	100201.41	880180.15	880276.53	1000087.38
39	6366.14	6379.04	100203.26	880387.64	880475.83	1000088.18
40	6395.17	6408.29	100205.12	880585.23	880674.22	1000088.99
41	6424.20	6437.50	100206.99	880781.92	880871.72	1000089.80
42	6453.23	6466.71	100208.87	880977.72	881068.34	1000090.62
43	6482.26	6495.92	100210.76	881172.64	881264.07	1000091.44
44	6511.29	6525.13	100212.66	881366.66	881459.94	1000092.26
45	6540.31	6554.35	100214.57	881559.85	881653.94	1000093.09
46	6569.34	6583.56	100216.49	881752.17	881846.08	1000093.92
47	6598.36	6612.78	100218.41	881943.63	882038.58	1000094.75
48	6627.39	6641.99	100220.34	882134.25	882229.84	1000095.59
49	6656.41	6671.21	100222.28	882324.04	882420.46	1000096.43
50	6685.44	6700.43	100224.21	882512.00	882610.26	1000097.27
51	6714.46	6729.65	100226.15	882701.12	882799.24	1000098.12
52	6743.48	6758.87	100228.16	882888.44	882987.41	1000098.97
53	6772.51	6788.09	100230.13	883074.95	883174.78	1000099.83
54	6801.53	6817.32	100232.11	883260.66	883361.34	1000100.69
55	6830.55	6846.54	100234.10	883445.57	883547.12	1000101.55
56	6859.57	6875.77	100236.10	883629.60	883732.11	1000102.42
57	6888.59	6904.99	100238.11	883813.04	883916.33	1000103.29
58	6917.61	6934.22	100240.13	883995.61	884099.77	1000104.16
59	6946.63	6963.45	100242.16	884177.41	884282.45	1000105.04
60	6975.66	6992.68	100244.19	884358.45	884464.37	1000105.92

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meologarith. pro Tangente	Tomologari. pro Secante
60	99862.95	1908113.67	1910732.26	999940.44	1128060.42	1128119.98
59	99861.42	1897552.26	1900185.40	999939.78	1127819.37	1127879.60
58	99859.89	1887106.83	1890754.50	999939.11	1127579.65	1127640.54
57	99858.35	1876775.39	1879437.65	999938.44	1127341.23	1127402.79
56	99856.83	186656.18	1869232.97	999937.76	1127104.11	1127166.34
55	99855.24	1856447.34	1859138.71	999937.08	1126868.26	1126931.18
54	99853.07	1846447.09	1849153.01	999936.40	1126633.09	1126697.28
53	99852.09	1836553.70	1839274.17	999935.72	1126400.36	1126464.65
52	99850.50	1826765.44	1829500.48	999935.03	1126168.28	1126233.25
51	99848.91	1817087.67	1819830.26	999934.33	1125937.41	1126003.09
50	99847.31	1807497.74	1810161.88	999933.64	1125707.78	1125774.14
49	99845.70	1798015.05	1800793.75	999932.93	1125479.33	1125546.40
48	99844.08	1788631.04	1791424.29	999932.23	1125252.08	1125319.85
47	99842.45	1779344.17	1782151.98	999931.52	1125026.00	1125094.47
46	99840.81	1770152.94	1772975.31	999930.81	1124801.08	1124870.27
45	99839.16	1761055.88	1763892.80	999930.09	1124577.31	1124647.23
44	99837.51	1752051.55	1754903.03	999929.38	1124354.69	1124425.31
43	99835.85	1743138.54	1746004.57	999928.65	1124133.19	1124204.54
42	99834.18	1734315.46	1737196.05	999927.93	1123912.81	1123984.88
41	99832.50	1725580.95	1728476.10	999927.20	1123693.53	1123766.34
40	99830.81	1716933.60	1719843.40	999926.46	1123475.35	1123548.89
39	99829.11	1708372.38	1711296.64	999925.72	1123258.25	1123332.53
38	99827.41	1699895.74	1702834.56	999924.98	1123042.26	1123117.25
37	99825.70	1691502.51	1694455.89	999924.24	1122827.26	1122903.03
36	99824.08	1683191.48	1686150.41	999923.49	1122613.35	1122689.86
35	99822.45	1674961.44	1677943.93	999922.74	1122400.48	1122477.74
34	99820.81	1666811.20	1669808.25	999921.98	1122188.64	1122266.66
33	99819.16	1658739.62	1661751.22	999921.22	1121977.82	1122056.60
32	99817.51	1650745.55	1653771.71	999920.46	1121768.01	1121847.56
31	99815.85	1642827.80	1645808.61	999919.69	1121559.21	1121639.52
30	99814.18	1634985.55	1638040.82	999918.92	1121351.39	1121432.47
29	99812.50	1627217.44	1630287.28	999918.15	1121144.56	1121226.41
28	99810.81	1619522.53	1622606.03	999917.37	1120938.70	1121021.33
27	99809.11	1611899.79	1614998.74	999916.59	1120733.80	1120817.22
26	99807.41	1604348.19	1607461.70	999915.80	1120529.86	1120614.06
25	99805.70	1596866.74	1599904.81	999915.01	1120326.87	1120411.86
24	99804.08	1589454.48	1592597.11	999914.22	1120124.81	1120210.59
23	99802.45	1582110.45	1585367.64	999913.42	1119923.68	1120010.26
22	99800.81	1574833.71	1578200.45	999912.62	1119723.47	1119810.84
21	99799.15	1567623.33	157109.63	999911.82	1119524.17	1119612.36
20	99797.51	1560478.41	1563679.27	999911.01	1119325.78	1119414.77
19	99795.85	1553390.06	1556613.48	999910.20	1119128.28	1119218.08
18	99794.18	1546361.41	1549611.39	999909.38	1118931.66	1119022.28
17	99792.50	1539427.60	1542672.15	999908.56	1118735.93	1118827.36
16	99790.81	1532535.80	1535704.00	999907.74	1118541.06	1118633.32
15	99789.11	1525705.27	1528807.83	999906.91	1118347.06	1118440.15
14	99787.41	1518934.90	1522223.12	999906.08	1118153.92	1118247.83
13	99785.70	1512224.20	1515526.93	999905.25	1117961.62	1118056.37
12	99784.04	1505572.27	1508889.61	999904.41	1117770.16	1117865.75
11	99782.33	1498978.36	1502310.26	999903.57	1117579.54	1117675.96
10	99780.62	1492441.70	1495788.16	999902.73	1117389.74	1117487.01
9	99778.91	1485961.55	1489322.58	999901.88	1117200.70	1117298.88
8	99777.20	1479537.18	1482912.77	999901.03	1117012.59	1117111.56
7	99775.49	1473167.87	1476558.02	999900.17	1116825.21	1116925.05
6	99773.78	1466852.02	1470257.63	999899.31	1116638.66	1116739.34
5	99772.07	1460591.63	1464010.00	999898.45	1116452.88	1116554.43
4	99770.36	1454383.22	1457817.15	999897.58	1116267.80	1116370.31
3	99768.65	1448227.32	1451676.71	999896.71	1116083.67	1116186.06
2	99766.94	1442122.07	1445585.02	999895.84	1115900.23	1116004.30
1	99765.23	1436067.61	1439547.11	999894.96	1115717.55	1115822.50
0	99763.52	1430065.61	1433558.70	999894.08	1115535.63	1115641.55

4	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	6975.65	6992.68	100244.19	884358.45	884464.37	1000105.92
1	7004.66	7081.91	100246.25	884538.74	884645.54	1000106.81
2	7033.68	7051.15	100248.28	884718.27	884825.07	1000107.70
3	7062.70	7080.38	100250.34	884897.07	885005.60	1000108.59
4	7091.71	7109.61	100252.41	885075.12	885184.61	1000109.43
5	7120.73	7138.85	100254.49	885252.45	885362.83	1000110.38
6	7149.74	7168.07	100256.58	885429.05	885540.34	1000111.29
7	7178.76	7197.33	100258.68	885604.93	885717.13	1000112.20
8	7207.77	7226.57	100260.78	885780.10	885893.21	1000113.11
9	7236.78	7255.81	100262.89	885954.57	886068.59	1000114.02
10	7265.80	7285.05	100265.01	886128.33	886243.27	1000114.94
11	7294.81	7314.30	100267.14	886301.39	886417.25	1000115.86
12	7323.82	7343.54	100269.28	886473.76	886590.55	1000116.79
13	7352.83	7372.77	100271.43	886645.45	886763.17	1000117.72
14	7381.84	7402.03	100273.58	886816.46	886935.11	1000118.65
15	7410.85	7431.28	100275.74	886986.80	887106.38	1000119.58
16	7439.86	7460.53	100277.91	887156.46	887276.91	1000120.53
17	7468.87	7489.79	100280.09	887325.46	887446.91	1000121.47
18	7497.87	7519.04	100282.28	887493.81	887616.23	1000122.42
19	7526.88	7548.29	100284.48	887661.50	887784.81	1000123.37
20	7555.89	7577.55	100286.68	887828.54	887952.86	1000124.33
21	7584.89	7606.80	100288.89	887994.93	888120.22	1000125.29
22	7613.90	7636.06	100291.11	888160.69	888286.94	1000126.25
23	7642.90	7665.32	100293.34	888325.81	888453.03	1000127.22
24	7671.90	7694.58	100295.58	888490.31	888618.50	1000128.19
25	7700.91	7723.84	100297.83	888654.18	888783.34	1000129.16
26	7729.91	7753.11	100300.09	888817.43	888947.57	1000130.14
27	7758.91	7782.37	100302.36	888980.07	889111.10	1000131.12
28	7787.91	7811.64	100304.64	889142.09	889274.20	1000132.10
29	7816.91	7840.90	100306.93	889303.51	889436.60	1000133.09
30	7845.91	7870.17	100309.22	889464.33	889598.42	1000134.04
31	7874.91	7899.44	100311.52	889624.55	889759.63	1000135.08
32	7903.91	7928.71	100313.83	889784.18	889920.26	1000136.08
33	7932.90	7957.98	100316.15	889943.22	890080.30	1000137.08
34	7961.90	7987.26	100318.48	890101.68	890239.77	1000138.09
35	7990.90	8016.53	100320.81	890259.55	890398.66	1000139.10
36	8019.89	8045.81	100323.15	890416.85	890556.97	1000140.12
37	8048.89	8075.09	100325.50	890573.58	890714.71	1000141.14
38	8077.88	8104.37	100327.86	890729.75	890871.90	1000142.16
39	8106.87	8133.65	100330.23	890885.35	891028.53	1000143.18
40	8135.87	8162.93	100332.61	891040.39	891184.60	1000144.21
41	8164.86	8192.21	100335.00	891194.87	891340.12	1000145.25
42	8193.85	8221.50	100337.40	891348.81	891495.09	1000146.28
43	8222.84	8250.78	100339.80	891502.19	891649.52	1000147.32
44	8251.83	8280.07	100342.21	891655.04	891803.40	1000148.37
45	8280.82	8309.36	100344.63	891807.34	891955.75	1000149.42
46	8309.81	8338.65	100347.06	891959.11	892109.57	1000150.47
47	8338.80	8367.94	100349.50	892110.34	892261.86	1000151.52
48	8367.78	8397.23	100351.95	892261.05	892413.63	1000152.58
49	8396.77	8426.53	100354.41	892411.23	892564.87	1000153.64
50	8425.76	8455.83	100356.87	892560.89	892715.60	1000154.71
51	8454.74	8485.12	100359.34	892710.03	892865.81	1000155.78
52	8483.73	8514.42	100361.82	892858.66	893015.52	1000156.85
53	8512.71	8543.72	100364.31	893006.78	893164.71	1000157.93
54	8541.69	8573.02	100366.81	893154.39	893313.40	1000159.01
55	8570.67	8602.33	100369.32	893301.50	893461.60	1000160.10
56	8599.66	8631.63	100371.84	893448.11	893609.29	1000161.19
57	8628.64	8660.94	100374.30	893594.22	893756.50	1000162.28
58	8657.62	8690.25	100376.89	893739.83	893903.21	1000163.37
59	8686.60	8719.56	100379.43	893884.06	894049.44	1000164.47
60	8715.57	8748.87	100381.98	894029.60	894195.18	1000165.58

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
60	99756.40	1430066.63	1433558.70	999894.08	1115535.63	1115641.55
59	99754.37	1424113.37	1427620.01	999893.19	1115354.46	1115461.26
58	99752.33	1418209.24	1421730.45	999892.30	1115174.03	1115281.73
57	99750.28	1412353.63	1415839.39	999891.41	1114994.34	1115102.93
56	99748.22	1406545.93	1410096.25	999890.52	1114815.39	1114924.88
55	99746.15	1400785.56	1404350.45	999889.62	1114637.17	1114747.55
54	99744.07	1395071.04	1398651.39	999888.71	1114459.66	1114570.95
53	99741.99	1389404.51	1392998.52	999887.80	1114282.87	1114395.07
52	99739.90	1383782.70	1387391.28	999886.89	1114106.79	1114219.90
51	99737.80	1378205.98	1381829.12	999885.98	1113931.41	1114045.43
50	99735.69	1372673.79	1376311.40	999885.06	1113756.73	1113871.67
49	99733.57	1367185.67	1370837.87	999884.14	1113582.75	1113698.61
48	99731.44	1361740.89	1365407.72	999883.21	1113409.45	1113526.24
47	99729.31	1356339.15	1360020.54	999882.28	1113236.83	1113354.55
46	99727.17	1350979.86	1354675.82	999881.35	1113064.89	1113183.54
45	99725.02	1345662.53	1349373.06	999880.41	1112893.62	1113013.20
44	99722.86	1340386.67	1344111.76	999879.47	1112723.01	1112843.54
43	99720.69	1335151.79	1338891.44	999878.53	1112553.06	1112674.54
42	99718.51	1329957.41	1333711.63	999877.58	1112383.77	1112506.19
41	99716.32	1324803.07	1328571.86	999876.63	1112215.13	1112338.50
40	99714.13	1319688.30	1323471.65	999875.67	1112047.14	1112171.46
39	99711.93	1314612.66	1318410.57	999874.71	1111879.78	1112005.07
38	99709.72	1309575.68	1313388.16	999873.75	1111713.06	1111839.31
37	99707.50	1304576.93	1308403.08	999872.78	1111546.07	1111674.19
36	99705.27	1299615.98	1303457.60	999871.81	1111381.50	1111509.69
35	99703.03	1294692.40	1298548.58	999870.84	1111216.66	1111345.82
34	99700.77	1289805.77	1293676.51	999869.86	1111052.43	1111182.57
33	99698.54	1284955.66	1288840.97	999868.88	1110888.81	1111019.93
32	99696.28	1280141.68	1284041.55	999867.90	1110725.80	1110857.91
31	99694.01	1275363.41	1279277.86	999866.91	1110563.40	1110696.49
30	99691.73	1270620.47	1274540.43	999865.91	1110401.58	1110535.67
29	99689.44	1265912.46	1269856.04	999864.92	1110240.37	1110375.45
28	99687.13	1261239.00	1265197.15	999863.92	1110079.74	1110215.82
27	99684.85	1256599.71	1260572.42	999862.92	1109919.70	1110056.78
26	99682.54	1251994.20	1255981.48	999861.91	1109760.23	1109898.32
25	99680.22	1247422.12	1251423.97	999860.90	1109601.34	1109740.45
24	99677.89	1242883.10	1246899.52	999859.88	1109443.03	1109583.15
23	99675.55	1238376.79	1242407.77	999858.86	1109285.28	1109426.42
22	99673.20	1233902.82	1237948.37	999857.84	1109128.10	1109270.25
21	99670.85	1229460.85	1233520.97	999856.82	1108971.47	1109114.65
20	99668.49	1225050.55	1229125.23	999855.79	1108815.40	1108959.61
19	99666.12	1220671.56	1224760.82	999854.75	1108659.88	1108805.13
18	99663.74	1216323.56	1220427.39	999853.72	1108504.91	1108651.19
17	99661.35	1212006.22	1216124.62	999852.68	1108350.48	1108497.81
16	99658.95	1207719.22	1211852.18	999851.63	1108196.60	1108344.96
15	99656.55	1203462.23	1207609.76	999850.58	1108043.25	1108192.66
14	99654.14	1199234.95	1203397.05	999849.53	1107890.43	1108040.89
13	99651.72	1195037.05	1199213.72	999848.48	1107738.14	1107889.66
12	99649.29	1190868.24	1195059.48	999847.42	1107586.37	1107738.95
11	99646.85	1186727.21	1190934.02	999846.36	1107435.13	1107588.77
10	99644.40	1182616.67	1186837.05	999845.29	1107284.40	1107439.11
9	99641.94	1178533.31	1182768.27	999844.22	1107134.19	1107289.97
8	99639.48	1174477.86	1178727.39	999843.15	1106984.48	1107141.34
7	99637.01	1170450.03	1174714.12	999842.07	1106835.29	1106993.22
6	99634.53	1166449.53	1170728.19	999840.99	1106686.60	1106845.61
5	99632.04	1162476.08	1166769.32	999839.90	1106538.40	1106698.50
4	99629.54	1158520.42	1162837.23	999838.81	1106390.71	1106551.89
3	99627.03	1154600.27	1158931.65	999837.72	1106243.50	1106405.78
2	99624.52	1150715.36	1155052.31	999836.63	1106096.79	1106260.17
1	99622.00	1146847.43	1151198.96	999835.53	1105950.56	1106115.04
0	99619.47	1143005.23	1147371.32	999834.42	1105804.82	1105970.40

5	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	8715.57	8748.37	100381.98	894029.60	894195.18	1000165.58
1	8744.55	8778.18	100384.54	894173.76	894340.44	1000166.68
2	8773.53	8807.49	100387.11	894317.43	894485.23	1000167.80
3	8802.51	8836.81	100389.69	894460.63	894629.54	1000168.91
4	8831.48	8866.12	100392.28	894603.35	894773.38	1000170.03
5	8860.46	8895.44	100394.87	894745.61	894916.76	1000171.15
6	8889.43	8924.76	100397.47	894887.39	895059.67	1000172.28
7	8918.40	8954.08	100400.08	895028.71	895202.11	1000173.40
8	8947.38	8983.41	100402.70	895169.57	895344.10	1000174.54
9	8976.35	9012.73	100405.33	895309.96	895485.64	1000175.67
10	9005.32	9042.06	100407.97	895449.91	895626.72	1000176.82
11	9034.29	9071.38	100410.61	895589.40	895767.35	1000177.96
12	9063.26	9100.71	100413.26	895728.43	895907.54	1000179.11
13	9092.23	9130.04	100415.92	895867.03	896047.28	1000180.26
14	9121.19	9159.38	100418.59	896005.17	896186.59	1000181.41
15	9150.16	9188.71	100421.27	896142.88	896325.45	1000182.57
16	9179.13	9218.04	100423.96	896280.14	896463.88	1000183.74
17	9208.09	9247.38	100426.66	896416.97	896601.88	1000184.90
18	9237.06	9276.72	100429.37	896553.37	896739.44	1000186.07
19	9266.02	9306.06	100432.08	896689.34	896876.58	1000187.25
20	9294.99	9335.40	100434.80	896824.87	897013.30	1000188.42
21	9323.95	9364.74	100437.53	896959.99	897149.59	1000189.60
22	9352.91	9394.09	100440.27	897094.68	897285.47	1000190.79
23	9381.87	9423.44	100443.02	897228.95	897420.92	1000191.98
24	9410.83	9452.78	100445.78	897362.80	897555.97	1000193.17
25	9439.79	9482.13	100448.55	897496.24	897690.60	1000194.37
26	9468.75	9511.48	100451.33	897629.26	897824.83	1000195.57
27	9497.71	9540.84	100454.11	897761.88	897958.65	1000196.77
28	9526.66	9570.19	100456.90	897894.08	898092.06	1000197.98
29	9555.62	9599.55	100459.70	898025.89	898225.07	1000199.19
30	9584.58	9628.90	100462.51	898157.29	898357.69	1000200.40
31	9613.53	9658.26	100465.33	898288.29	898489.91	1000201.62
32	9642.48	9687.63	100468.16	898418.89	898621.73	1000202.84
33	9671.44	9716.99	100470.99	898549.10	898753.17	1000204.07
34	9700.39	9746.35	100473.83	898678.91	898884.21	1000205.30
35	9729.34	9775.72	100476.68	898808.34	899014.87	1000206.53
36	9758.29	9805.09	100479.54	898937.37	899145.14	1000207.77
37	9787.24	9834.46	100482.41	899066.02	899275.03	1000209.01
38	9816.19	9863.83	100485.29	899194.29	899404.54	1000210.25
39	9845.14	9893.20	100488.18	899322.17	899533.67	1000211.50
40	9874.08	9922.57	100491.08	899449.68	899662.43	1000212.75
41	9903.03	9951.95	100493.99	899576.81	899790.81	1000214.01
42	9931.97	9981.33	100496.90	899703.56	899918.83	1000215.27
43	9960.92	10000.71	100499.82	899829.94	900046.47	1000216.53
44	9989.86	10000.09	100502.75	899955.95	900173.75	1000217.80
45	10018.81	10009.47	100505.69	900081.60	900300.66	1000219.07
46	10047.75	10008.85	100508.64	900206.87	900427.21	1000220.34
47	10076.69	10018.24	100511.60	900331.79	900553.40	1000221.62
48	10105.63	10157.63	100514.57	900456.34	900679.24	1000222.90
49	10134.57	10157.02	100517.54	900580.53	900804.73	1000224.18
50	10163.51	10216.41	100520.52	900704.36	900929.84	1000225.47
51	10192.45	10245.80	100523.51	900827.84	901054.61	1000226.77
52	10221.38	10275.20	100526.51	900950.96	901179.03	1000228.06
53	10250.32	10304.60	100529.51	901073.74	901303.10	1000229.36
54	10279.25	10334.00	100532.54	901196.16	901426.82	1000230.67
55	10308.19	10363.40	100535.57	901318.23	901550.21	1000231.97
56	10337.12	10392.80	100538.60	901439.96	901673.25	1000233.28
57	10366.05	10422.20	100541.64	901561.35	901795.94	1000234.60
58	10394.99	10451.60	100544.69	901682.39	901918.33	1000235.92
59	10423.92	10481.01	100547.75	901803.09	902040.31	1000237.24
60	10452.85	10510.42	100550.82	901923.46	902162.02	1000238.57

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Me/ologarith. pro Tangente	Tomologarith. pro Secante
60	99619.47	1143005.23	1147371.32	999834.42	1105804.82	1105970.40
59	99616.93	1139188.49	1143569.16	999833.32	1105659.56	1105826.24
58	99614.38	1135396.96	1139792.20	999832.20	1105514.77	1105682.57
57	99611.82	1131630.40	1136040.21	999831.09	1105370.46	1105539.37
56	99609.26	1127888.55	1132312.93	999829.97	1105226.62	1105396.65
55	99606.69	1124171.17	1128610.13	999828.85	1105083.24	1105254.39
54	99604.11	1120478.03	1124931.56	999827.72	1104940.33	1105112.61
53	99601.52	1116808.88	1121276.99	999826.60	1104797.89	1104971.29
52	99599.92	1113163.50	1117646.17	999825.46	1104655.90	1104830.43
51	99596.31	1109541.64	1114038.90	999824.33	1104514.36	1104690.04
50	99593.69	1105943.13	1110454.92	999823.18	1104373.28	1104550.09
49	99591.07	1102367.63	1106804.03	999822.04	1104232.65	1104410.60
48	99588.44	1098815.01	1103355.99	999820.89	1104092.46	1104271.57
47	99585.80	1095285.04	1099840.59	999819.74	1103952.72	1104132.97
46	99583.15	1091777.49	1096347.61	999818.50	1103813.41	1103994.83
45	99580.49	1088292.14	1092876.84	999817.43	1103674.55	1103857.12
44	99577.82	1084828.80	1089428.07	999816.26	1103536.12	1103719.86
43	99575.15	1081387.24	1086001.09	999815.10	1103398.12	1103583.03
42	99572.47	1077967.27	1082595.69	999813.93	1103260.56	1103446.63
41	99569.78	1074568.68	1079211.68	999812.75	1103123.42	1103310.66
40	99567.08	1071191.26	1075848.84	999811.58	1102986.70	1103175.13
39	99564.37	1067834.84	1072506.90	999810.40	1102850.41	1103040.01
38	99561.65	1064499.19	1069185.92	999809.21	1102714.53	1102905.32
37	99558.92	1061184.14	1065885.45	999808.02	1102579.08	1102771.05
36	99556.19	1057889.50	1062605.38	999806.83	1102444.03	1102637.20
35	99553.45	1054615.07	1059345.53	999805.63	1102309.40	1102503.76
34	99550.70	1051360.67	1056105.70	999804.43	1102175.17	1102370.74
33	99547.94	1048126.11	1052885.72	999803.23	1102041.35	1102238.12
32	99545.17	1044911.22	1049685.41	999802.02	1101907.94	1102105.92
31	99542.40	1041715.81	1046504.58	999800.81	1101774.93	1101974.11
30	99539.62	1038539.71	1043343.05	999799.60	1101642.31	1101842.71
29	99536.83	1035382.74	1040200.66	999798.38	1101510.09	1101711.71
28	99534.03	1032244.73	1037077.23	999797.16	1101378.27	1101581.11
27	99531.23	1029125.51	1033972.59	999795.93	1101246.83	1101450.90
26	99528.40	1026024.90	1030886.56	999794.70	1101115.79	1101321.09
25	99525.57	1022942.76	1027818.09	999793.47	1100985.13	1101191.66
24	99522.74	1019878.90	1024769.71	999792.23	1100854.86	1101062.63
23	99519.90	1016833.16	1021738.55	999790.99	1100724.97	1100933.98
22	99517.05	1013805.39	1018725.36	999789.75	1100595.46	1100805.71
21	99514.19	1010795.42	1015729.98	999788.50	1100466.33	1100677.83
20	99511.32	1007803.11	1012752.24	999787.25	1100337.57	1100550.32
19	99508.44	1004828.28	1009792.00	999786.00	1100209.19	1100423.19
18	99505.55	1001870.80	1006840.09	999784.73	1100081.17	1100296.44
17	99502.66	998930.50	1003923.38	999783.47	1099953.53	1100170.06
16	99499.76	996007.24	1001014.70	999782.20	1099826.25	1100044.05
15	99496.85	993100.88	998112.91	999780.93	1099699.34	1099918.40
14	99493.93	990211.25	995247.87	999779.66	1099572.79	1099793.13
13	99491.00	987338.23	992389.43	999778.38	1099446.60	1099668.21
12	99488.06	984481.66	989547.44	999777.10	1099320.76	1099543.66
11	99485.12	981641.40	986721.76	999775.82	1099195.29	1099419.47
10	99482.17	978817.32	983912.27	999774.53	1099070.16	1099295.64
9	99479.21	976009.27	981118.80	999773.23	1098945.39	1099172.16
8	99476.24	973217.13	978341.24	999771.94	1098820.97	1099049.04
7	99473.26	970440.75	975570.44	999770.64	1098696.90	1098926.26
6	99470.27	967680.00	972833.27	999769.33	1098573.18	1098803.84
5	99467.28	964934.75	970102.60	999768.03	1098449.79	1098681.77
4	99464.28	962204.86	967387.10	999766.72	1098326.75	1098560.04
3	99461.27	959490.22	964687.24	999765.40	1098204.06	1098438.65
2	99458.25	956790.68	962002.29	999764.08	1098081.69	1098317.61
1	99455.22	954106.13	959332.33	999762.76	1097959.67	1098196.91
0	99452.18	951436.45	956677.22	999761.43	1097837.98	1098076.54

6	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	10452.85	10510.42	100550.82	901923.46	902162.02	1000238.57
1	10481.78	10539.83	100553.90	902043.48	902283.38	1000239.89
2	10510.70	10569.24	100556.99	902163.18	902404.41	1000241.23
3	10539.63	10598.66	100560.09	902282.54	902525.10	1000242.57
4	10568.56	10628.08	100563.20	902401.57	902645.48	1000243.91
5	10597.48	10657.50	100566.31	902520.27	902765.52	1000245.25
6	10626.41	10686.92	100569.43	902638.65	902885.24	1000246.60
7	10655.33	10716.34	100572.56	902756.69	903004.64	1000247.95
8	10684.25	10745.76	100575.70	902874.42	903123.73	1000249.31
9	10713.18	10775.19	100578.85	902991.82	903242.49	1000250.67
10	10742.10	10804.62	100582.01	903108.90	903360.93	1000252.05
11	10771.02	10834.05	100585.18	903225.67	903479.66	1000253.40
12	10799.94	10863.48	100588.35	903342.12	903596.88	1000254.77
13	10828.85	10892.91	100591.53	903458.25	903714.39	1000256.14
14	10857.77	10922.34	100594.72	903574.07	903831.59	1000257.52
15	10886.69	10951.78	100597.92	903689.58	903948.48	1000258.90
16	10915.60	10981.22	100601.13	903804.77	904065.06	1000260.29
17	10944.52	11010.66	100604.35	903919.66	904181.24	1000261.67
18	10973.43	11040.10	100607.58	904034.24	904297.31	1000263.07
19	11002.34	11069.54	100610.81	904148.52	904412.99	1000264.46
20	11031.26	11098.99	100614.05	904262.49	904528.36	1000265.86
21	11060.17	11128.44	100617.30	904376.17	904643.43	1000267.27
22	11089.08	11157.89	100620.56	904489.54	904758.21	1000268.68
23	11117.99	11187.34	100623.83	904602.61	904872.70	1000270.09
24	11146.89	11216.79	100627.11	904715.38	904986.89	1000271.50
25	11175.80	11246.25	100630.40	904827.86	905100.78	1000272.92
26	11204.71	11275.71	100633.70	904940.05	905214.39	1000274.34
27	11233.61	11305.17	100637.01	905051.94	905327.71	1000275.77
28	11262.52	11334.63	100640.32	905163.54	905440.74	1000277.20
29	11291.42	11364.09	100643.64	905274.85	905553.49	1000278.63
30	11320.32	11393.56	100646.97	905385.88	905665.95	1000280.07
31	11349.22	11423.03	100650.31	905496.61	905778.13	1000281.51
32	11378.12	11452.50	100653.66	905607.05	905890.02	1000282.96
33	11407.02	11481.97	100657.02	905717.23	906001.64	1000284.41
34	11435.92	11511.44	100660.39	905827.11	906112.97	1000285.86
35	11464.82	11540.91	100663.77	905936.72	906224.03	1000287.32
36	11493.71	11570.39	100667.15	906046.04	906334.82	1000288.78
37	11522.61	11599.87	100670.54	906155.09	906445.33	1000290.24
38	11551.51	11629.35	100673.94	906263.80	906555.56	1000291.71
39	11580.40	11658.83	100677.35	906372.35	906665.53	1000293.18
40	11609.29	11688.31	100680.77	906480.57	906775.22	1000294.65
41	11638.18	11717.80	100684.20	906588.52	906884.65	1000296.13
42	11667.07	11747.29	100687.64	906696.19	906993.81	1000297.61
43	11695.96	11776.78	100691.08	906803.60	907102.70	1000299.10
44	11724.85	11806.28	100694.53	906910.74	907211.33	1000300.59
45	11753.74	11835.78	100697.99	907017.61	907319.69	1000302.08
46	11782.63	11865.28	100701.46	907124.21	907427.79	1000303.58
47	11811.51	11894.78	100704.94	907230.55	907535.63	1000305.08
48	11840.40	11924.28	100708.43	907336.63	907643.21	1000306.58
49	11869.28	11953.78	100711.93	907442.44	907750.55	1000308.09
50	11898.16	11983.28	100715.44	907547.99	907857.60	1000309.60
51	11927.04	12012.79	100718.96	907653.29	907964.41	1000311.12
52	11955.93	12042.30	100722.48	907758.32	908070.96	1000312.64
53	11984.81	12071.81	100726.01	907863.10	908177.26	1000314.16
54	12013.68	12101.32	100729.55	907967.62	908283.31	1000315.69
55	12042.56	12130.84	100733.10	908071.89	908389.11	1000317.23
56	12071.44	12160.36	100736.66	908175.90	908494.66	1000318.75
57	12100.31	12189.88	100740.23	908279.66	908599.06	1000320.29
58	12129.19	12219.40	100743.81	908383.27	908705.01	1000321.83
59	12158.06	12248.93	100747.40	908486.43	908809.81	1000323.38
60	12186.93	12278.46	100750.95	908589.45	908914.38	1000324.93

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
60	99452.18	951436.45	956677.22	999761.43	1097837.98	1098076.54
59	99449.14	948731.49	954036.86	999760.11	1097716.62	1097956.52
58	99446.09	946141.16	951411.10	999758.77	1097595.59	1097836.82
57	99443.03	943515.31	948799.84	999757.43	1097474.90	1097717.46
56	99439.96	940903.84	946202.96	999756.09	1097354.52	1097598.43
55	99436.88	938306.63	943620.33	999754.75	1097234.48	1097479.73
54	99433.70	935723.55	941051.84	999753.40	1097114.76	1097361.35
53	99430.69	933154.50	938457.33	999752.05	1096995.36	1097243.34
52	99427.59	930599.36	935956.82	999750.69	1096876.27	1097125.58
51	99424.48	928058.02	933430.06	999749.33	1096757.51	1097008.18
50	99421.36	925530.35	930916.99	999747.97	1096639.07	1096891.10
49	99418.23	923016.27	928417.42	999746.60	1096520.94	1096774.33
48	99415.09	920515.64	925931.45	999745.23	1096403.12	1096657.88
47	99411.94	918028.58	923458.77	999743.86	1096285.61	1096541.75
46	99408.79	915554.36	920999.34	999742.48	1096168.41	1096425.93
45	99405.63	913093.48	918553.05	999741.10	1096051.52	1096310.42
44	99402.46	910645.64	916119.80	999739.71	1095934.94	1096195.23
43	99399.28	908210.74	913699.49	999738.33	1095818.66	1096080.34
42	99396.09	905788.67	911292.00	999736.93	1095702.69	1095965.76
41	99392.89	903379.33	908897.15	999735.54	1095587.01	1095851.48
40	99389.69	900982.61	906515.25	999734.14	1095471.64	1095737.51
39	99386.48	898598.43	904145.53	999732.73	1095356.57	1095623.83
38	99383.26	896226.68	901788.37	999731.32	1095241.79	1095510.46
37	99380.03	893867.26	899443.54	999729.91	1095127.30	1095397.39
36	99376.79	891520.08	897110.95	999728.50	1095013.11	1095284.62
35	99373.54	889185.05	894790.51	999727.08	1094899.22	1095172.14
34	99370.28	886862.06	892482.11	999725.66	1094785.61	1095059.95
33	99367.02	884551.03	890185.67	999724.23	1094672.29	1094948.06
32	99363.75	882251.86	887901.09	999722.80	1094559.26	1094836.46
31	99360.47	879964.46	885628.28	999721.37	1094446.51	1094725.15
30	99357.18	877688.74	883367.15	999719.93	1094334.05	1094614.12
29	99353.88	875424.61	881117.61	999718.49	1094221.87	1094503.39
28	99350.58	873171.98	878879.57	999717.04	1094109.68	1094392.94
27	99347.27	870930.77	876652.95	999715.59	1093998.36	1094282.77
26	99343.95	868700.88	874437.66	999714.14	1093887.03	1094172.81
25	99340.62	866482.23	872233.61	999712.68	1093775.97	1094063.28
24	99337.28	864274.75	870040.71	999711.22	1093665.18	1093953.96
23	99333.93	862078.33	867858.89	999709.76	1093554.67	1093844.91
22	99330.57	859892.90	865688.05	999708.29	1093444.44	1093736.14
21	99327.20	857718.38	863528.12	999706.82	1093334.47	1093627.65
20	99323.83	855554.68	861379.01	999705.35	1093224.78	1093519.43
19	99320.45	853401.72	859240.65	999703.87	1093115.35	1093411.48
18	99317.06	851259.43	857112.95	999702.39	1093006.19	1093303.81
17	99313.66	849127.72	854995.84	999700.90	1092897.30	1093196.40
16	99310.25	847006.51	852889.23	999699.41	1092788.67	1093089.26
15	99306.84	844895.73	850793.04	999697.92	1092680.31	1092982.39
14	99303.42	842795.31	848707.21	999696.42	1092572.21	1092875.79
13	99299.99	840705.15	846631.65	999694.92	1092464.37	1092769.45
12	99296.55	838625.19	844566.29	999693.42	1092356.79	1092663.37
11	99293.10	836555.36	842511.05	999691.91	1092249.47	1092557.56
10	99289.64	834495.57	840465.86	999690.40	1092142.40	1092452.01
9	99286.17	832445.77	838430.65	999688.88	1092035.59	1092346.71
8	99282.70	830405.98	836405.34	999687.36	1091929.04	1092241.68
7	99279.22	828375.79	834389.86	999685.84	1091822.74	1092136.90
6	99275.73	826355.47	832384.15	999684.31	1091716.69	1092032.38
5	99272.23	824344.85	830388.12	999682.78	1091610.89	1091928.11
4	99268.72	822343.84	828401.71	999681.25	1091505.34	1091824.10
3	99265.21	820352.30	826424.85	999679.71	1091400.04	1091720.24
2	99261.69	818370.41	824457.48	999678.17	1091294.99	1091616.83
1	99258.16	816397.86	822499.52	999676.62	1091190.10	1091513.57
0	99254.62	814434.64	820550.90	999675.07	1091085.62	1091410.55

7.	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	12186.93	12278.46	100750.99	908589.45	908314.38	1000324.93
1	12215.81	12307.99	100754.59	908692.21	909018.69	1000326.48
2	12244.68	12337.52	100758.20	908794.73	909122.77	1000328.04
3	12273.55	12367.05	100761.82	908897.00	909226.60	1000329.60
4	12302.41	12396.58	100765.45	908999.03	909330.20	1000331.16
5	12331.28	12426.12	100769.09	909100.82	909433.55	1000332.73
6	12360.15	12455.66	100772.74	909202.37	909536.67	1000334.30
7	12389.01	12485.20	100776.39	909303.67	909639.55	1000335.88
8	12417.88	12514.74	100780.05	909404.74	909742.10	1000337.46
9	12446.74	12544.29	100783.72	909505.56	909844.60	1000339.04
10	12475.60	12573.84	100787.40	909606.15	909946.78	1000340.63
11	12504.46	12603.39	100791.09	909706.51	910048.72	1000342.22
12	12533.32	12632.94	100794.79	909806.62	910150.44	1000343.81
13	12562.18	12662.49	100798.50	909906.51	910251.92	1000345.41
14	12591.04	12692.05	100802.22	910006.16	910353.17	1000347.01
15	12619.90	12721.61	100805.95	910105.58	910454.20	1000348.62
16	12648.75	12751.17	100809.6	910204.77	910555.0	1000350.23
17	12677.61	12780.73	100813.41	910303.73	910655.57	1000351.84
18	12706.46	12810.29	100817.18	910402.46	910755.91	1000353.45
19	12735.31	12839.86	100820.94	910500.96	910856.04	1000355.07
20	12764.16	12869.43	100824.71	910599.24	910956.94	1000356.70
21	12793.01	12899.00	100828.40	910697.20	911055.62	1000358.33
22	12821.86	12928.57	100832.28	910795.12	911155.08	1000359.96
23	12850.71	12958.15	100836.07	910892.72	911254.31	1000361.59
24	12879.56	12987.73	100839.88	910990.10	911353.33	1000363.23
25	12908.41	13017.31	100843.70	911087.26	911452.13	1000364.87
26	12937.25	13046.80	100847.52	911184.20	911550.72	1000366.52
27	12966.09	13076.48	100851.35	911280.92	911649.09	1000368.17
28	12994.94	13106.07	100855.19	911377.42	911747.24	1000369.82
29	13023.77	13135.66	100859.04	911473.70	911845.18	1000371.48
30	13052.62	13165.25	100862.90	911569.77	911942.91	1000373.14
31	13081.46	13194.84	100866.77	911665.62	912040.43	1000374.81
32	13110.30	13224.44	100870.65	911761.25	912137.72	1000376.48
33	13139.13	13254.04	100874.53	911856.67	912234.82	1000378.15
34	13167.97	13283.64	100878.42	911951.88	912331.71	1000379.83
35	13196.81	13313.24	100882.32	912046.88	912428.39	1000381.51
36	13225.64	13342.85	100886.23	912141.67	912524.86	1000383.10
37	13254.47	13372.46	100890.15	912236.24	912621.12	1000384.88
38	13283.30	13402.07	100894.08	912330.61	912717.18	1000386.57
39	13312.13	13431.68	100898.02	912424.77	912813.03	1000388.26
40	13340.96	13461.29	100901.97	912518.72	912908.68	1000389.96
41	13369.79	13490.91	100905.92	912612.46	913004.13	1000391.66
42	13398.62	13520.53	100909.88	912706.00	913099.37	1000393.37
43	13427.44	13550.15	100913.85	912799.34	913194.42	1000395.08
44	13456.27	13579.77	100917.83	912892.47	913289.26	1000396.79
45	13485.09	13609.40	100921.82	912985.39	913383.91	1000398.51
46	13513.92	13639.03	100925.82	913078.12	913478.35	1000400.23
47	13542.74	13668.66	100929.83	913170.64	913572.60	1000401.96
48	13571.56	13698.29	100933.85	913262.97	913666.65	1000403.69
49	13600.38	13727.93	100937.88	913355.09	913760.51	1000405.42
50	13629.19	13757.57	100941.92	913447.02	913854.17	1000407.16
51	13658.01	13787.21	100945.96	913538.75	913947.64	1000408.89
52	13686.83	13816.85	100950.01	913630.28	914040.92	1000410.64
53	13715.64	13846.50	100954.07	913721.61	914134.00	1000412.39
54	13744.45	13876.15	100958.14	913812.75	914226.89	1000414.14
55	13773.27	13905.80	100962.22	913903.70	914319.59	1000415.89
56	13802.08	13935.45	100966.31	913994.45	914412.10	1000417.65
57	13830.89	13965.10	100970.41	914085.01	914504.42	1000419.41
58	13859.70	13994.76	100974.52	914175.37	914596.55	1000421.18
59	13888.50	14024.42	100978.64	914265.55	914688.50	1000422.95
60	13917.31	14054.08	100982.76	914355.53	914780.25	1000424.72

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	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
60	99254.62	814414.64	820550.90	999675.07	1091085.62	1091410.55
59	99251.07	812480.71	818611.57	999673.52	1090981.31	1091307.79
58	99247.51	810535.99	816681.45	999671.96	1090877.23	1091205.27
57	99243.94	808600.42	814760.48	999670.40	1090773.40	1091103.00
56	99240.36	806673.94	812848.60	999668.84	1090669.80	1091000.97
55	99236.78	804716.47	810945.73	999667.27	1090566.45	1090899.18
54	99233.19	802847.96	809051.82	999665.70	1090463.33	1090797.63
53	99229.59	800948.35	807166.81	999664.12	1090360.45	1090696.33
52	99225.98	799057.56	805290.62	999662.54	1090257.81	1090595.26
51	99222.36	797175.55	803423.21	999660.96	1090155.40	1090494.44
50	99218.74	795302.24	801564.50	999659.37	1090053.22	1090393.85
49	99215.11	793437.58	799714.45	999657.78	1089951.28	1090293.49
48	99211.47	791581.51	797872.98	999656.19	1089849.56	1090193.38
47	99207.82	789733.96	796040.03	999654.59	1089748.08	1090093.49
46	99204.16	787894.89	794215.56	999652.99	1089646.83	1089993.84
45	99200.49	786064.23	792399.50	999651.38	1089545.80	1089894.42
44	99196.81	784241.91	790591.79	999649.77	1089445.00	1089795.23
43	99193.13	782427.90	788792.38	999648.16	1089344.43	1089696.27
42	99189.44	780612.12	787001.20	999646.55	1089244.09	1089597.54
41	99185.74	778824.53	785218.21	999644.93	1089143.96	1089499.04
40	99182.03	777035.06	783443.35	999643.30	1089044.06	1089400.76
39	99178.31	775253.66	781676.56	999641.67	1088944.38	1089302.71
38	99174.59	773480.28	779917.78	999640.04	1088844.92	1089204.88
37	99170.86	771714.86	778166.97	999638.41	1088745.69	1089107.28
36	99167.12	769957.35	776424.06	999636.77	1088646.67	1089009.90
35	99163.37	768207.69	774689.01	999635.13	1088547.87	1088912.74
34	99159.61	766465.84	772961.76	999633.48	1088449.28	1088815.80
33	99155.84	764731.74	771242.27	999631.83	1088350.91	1088719.08
32	99152.06	763005.33	769530.47	999630.18	1088252.76	1088622.58
31	99148.28	761286.57	767826.31	999628.52	1088154.82	1088526.30
30	99144.49	759575.41	766129.76	999626.86	1088057.09	1088430.23
29	99140.69	757871.79	764440.75	999625.19	1087959.57	1088334.38
28	99136.88	756175.67	762759.23	999623.52	1087862.27	1088238.75
27	99133.06	754486.99	761085.16	999621.85	1087765.18	1088143.33
26	99129.23	752805.71	759418.49	999620.17	1087668.29	1088048.12
25	99125.39	751131.78	757759.16	999618.49	1087571.61	1087953.12
24	99121.55	749465.14	756107.13	999616.81	1087475.14	1087858.33
23	99117.70	747805.76	754462.36	999615.12	1087378.88	1087763.76
22	99113.84	746153.57	752824.78	999613.43	1087282.82	1087669.39
21	99109.97	744508.55	751194.37	999611.74	1087186.97	1087575.23
20	99106.09	742870.64	749571.06	999610.04	1087091.32	1087481.28
19	99102.21	741239.78	747954.82	999608.34	1086995.87	1087387.54
18	99098.32	739615.95	746345.60	999606.63	1086900.63	1087294.00
17	99094.42	737999.09	744743.35	999604.92	1086805.58	1087200.66
16	99090.51	736389.16	743148.03	999603.21	1086710.74	1087107.53
15	99086.59	734786.10	741559.59	999601.49	1086616.09	1087014.61
14	99082.66	733189.89	739977.98	999599.77	1086521.65	1086921.88
13	99078.72	731600.47	738423.18	999598.04	1086427.40	1086829.36
12	99074.78	730017.80	736835.12	999596.31	1086333.35	1086737.08
11	99070.83	728441.84	735273.77	999594.58	1086239.49	1086644.91
10	99066.87	726872.55	733719.09	999592.84	1086145.83	1086552.98
9	99062.90	725309.87	732171.02	999591.11	1086052.30	1086461.25
8	99058.92	723753.78	730629.54	999589.36	1085959.08	1086369.72
7	99054.93	722204.22	729094.60	999587.61	1085866.00	1086278.39
6	99050.94	720661.16	727566.16	999585.86	1085773.11	1086187.25
5	99046.94	719124.56	726044.17	999584.11	1085680.41	1086096.30
4	99042.93	717594.37	724528.59	999582.35	1085587.90	1086005.55
3	99038.91	716070.56	723019.40	999580.59	1085495.58	1085914.99
2	99034.88	714553.08	721516.53	999578.82	1085403.45	1085824.63
1	99030.84	713041.90	720019.96	999577.05	1085311.50	1085734.45
0	99026.80	711536.97	718529.65	999575.28	1085219.75	1085644.47

8	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	13917.31	14054.08	100982.76	914355.53	914780.25	1000424.72
1	13946.12	14083.74	100986.89	914445.32	914871.82	1000426.50
2	13974.92	14113.41	100991.03	914534.93	914963.21	1000428.28
3	14003.72	14143.08	100995.18	914624.35	915054.41	1000430.07
4	14032.52	14172.75	100999.34	914713.58	915145.43	1000431.85
5	14061.32	14202.43	101003.51	914802.62	915236.27	1000433.65
6	14090.12	14232.11	101007.69	914891.49	915326.92	1000435.44
7	14118.92	14261.79	101011.88	914980.15	915417.39	1000437.24
8	14147.72	14291.47	101016.07	915068.64	915507.69	1000439.05
9	14176.51	14321.15	101020.27	915156.94	915597.80	1000440.85
10	14205.31	14350.84	101024.48	915245.07	915687.73	1000442.66
11	14234.10	14380.53	101028.70	915333.01	915777.48	1000444.48
12	14262.89	14410.22	101032.93	915420.76	915867.06	1000446.30
13	14291.68	14439.91	101037.17	915508.34	915956.46	1000448.12
14	14320.47	14469.61	101041.42	915595.74	916045.79	1000449.95
15	14349.26	14499.31	101045.68	915682.96	916134.77	1000451.78
16	14378.05	14529.01	101049.95	915770.00	916223.61	1000453.61
17	14406.84	14558.71	101054.23	915856.86	916312.31	1000455.45
18	14435.62	14588.42	101058.51	915943.54	916400.82	1000457.29
19	14464.40	14618.13	101062.80	916030.05	916489.10	1000459.13
20	14493.19	14647.84	101067.10	916116.39	916577.37	1000460.98
21	14521.97	14677.55	101071.51	916202.54	916665.38	1000462.83
22	14550.75	14707.27	101075.73	916288.52	916753.22	1000464.69
23	14579.53	14736.99	101080.06	916374.34	916840.89	1000466.55
24	14608.30	14766.71	101084.40	916459.94	916928.39	1000468.41
25	14637.08	14796.44	101088.75	916545.44	917015.72	1000470.28
26	14665.85	14826.17	101093.11	916630.74	917102.88	1000472.15
27	14694.63	14855.90	101097.47	916715.86	917189.89	1000474.03
28	14723.40	14885.63	101101.84	916800.81	917276.72	1000475.91
29	14752.17	14915.36	101106.22	916885.59	917363.38	1000477.79
30	14780.94	14945.10	101110.61	916970.21	917449.82	1000479.67
31	14809.71	14974.84	101115.01	917054.65	917536.22	1000481.56
32	14838.48	15004.58	101119.42	917138.93	917622.39	1000483.46
33	14867.24	15034.33	101123.84	917223.05	917708.40	1000485.36
34	14896.01	15064.08	101128.27	917306.99	917794.25	1000487.26
35	14924.77	15093.83	101132.71	917390.77	917879.93	1000489.16
36	14953.53	15123.58	101137.15	917474.37	917965.46	1000491.07
37	14982.30	15153.33	101141.60	917557.84	918050.82	1000492.98
38	15011.06	15183.09	101146.06	917641.12	918136.02	1000494.90
39	15039.81	15212.85	101150.53	917724.25	918221.06	1000496.82
40	15068.57	15242.61	101155.01	917807.21	918305.95	1000498.74
41	15097.33	15272.38	101159.50	917890.01	918390.68	1000500.67
42	15126.08	15302.15	101164.00	917972.65	918475.25	1000502.60
43	15154.84	15331.92	101168.51	918055.12	918559.66	1000504.54
44	15183.59	15361.69	101173.03	918137.44	918643.92	1000506.48
45	15212.34	15391.47	101177.56	918219.60	918728.02	1000508.42
46	15241.09	15421.25	101182.09	918301.60	918812.96	1000510.36
47	15269.84	15451.03	101186.63	918383.44	918897.75	1000512.31
48	15298.58	15480.82	101191.18	918465.12	918982.39	1000514.27
49	15327.33	15510.61	101195.74	918546.65	919066.87	1000516.23
50	15356.07	15540.40	101200.31	918628.02	919151.21	1000518.19
51	15384.82	15570.19	101204.89	918709.23	919235.39	1000520.15
52	15413.56	15600.00	101209.48	918790.29	919319.41	1000522.12
53	15442.30	15629.78	101214.08	918871.20	919403.29	1000524.09
54	15471.04	15659.58	101218.69	918951.95	919487.02	1000526.07
55	15499.78	15689.38	101223.31	919032.54	919570.59	1000528.05
56	15528.51	15719.19	101227.93	919112.99	919654.02	1000530.03
57	15557.25	15749.00	101232.56	919193.28	919737.30	1000532.02
58	15585.98	15778.81	101237.20	919273.42	919820.43	1000534.01
59	15614.72	15808.62	101241.85	919353.41	919903.41	1000536.01
60	15643.45	15838.44	101246.51	919433.24	919986.25	1000538.01

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
4.72	60 99026.80	711536.97	718529.65	999575.28	1085219.75	1085644.47
6.50	59 99012.75	710038.26	717045.56	999573.50	1085128.18	1085554.68
8.28	58 99018.69	708545.73	715567.64	999571.72	1085036.79	1085465.07
10.07	57 99014.62	707059.34	714095.87	999569.93	1084945.59	1085375.65
11.85	56 99010.54	705579.05	712630.19	999568.15	1084854.57	1085286.42
13.65	55 99006.45	704104.82	711170.58	999566.35	1084763.73	1085197.38
15.44	54 99002.36	702636.62	709717.00	999564.56	1084673.08	1085108.52
17.24	53 98998.26	701174.41	708269.41	999562.76	1084582.61	1085019.85
19.05	52 98994.15	699718.06	706827.77	999560.95	1084492.31	1084931.36
20.85	51 98990.03	698267.81	705392.05	999559.15	1084402.20	1084843.06
22.66	50 98985.90	696813.35	703962.20	999557.34	1084312.27	1084754.93
24.48	49 98981.76	695354.73	702538.20	999555.52	1084222.52	1084666.99
26.30	48 98977.62	693951.92	701120.01	999553.70	1084132.94	1084579.24
28.12	47 98973.47	692524.89	699707.60	999551.88	1084043.54	1084491.66
30.05	46 98969.31	691103.59	698300.92	999550.05	1083954.31	1084404.26
31.88	45 98965.14	689687.99	696899.94	999548.22	1083865.27	1084317.04
33.71	44 98960.96	688278.07	695504.64	999546.39	1083776.39	1084230.00
35.54	43 98956.77	686873.78	694114.96	999544.55	1083687.69	1084143.14
37.37	42 98952.57	685475.08	692730.89	999542.71	1083599.17	1084056.46
39.20	41 98948.37	684081.96	691352.39	999540.87	1083510.81	1083969.95
41.03	40 98944.16	682694.37	689979.42	999539.02	1083422.63	1083883.61
42.86	39 98939.94	681312.27	688611.95	999537.17	1083334.62	1083797.46
44.69	38 98935.71	679935.65	687240.95	999535.31	1083246.78	1083711.47
46.52	37 98931.47	678564.46	685893.38	999533.45	1083159.11	1083625.66
48.35	36 98927.23	677198.67	684542.21	999531.59	1083071.61	1083540.02
50.18	35 98922.98	675838.26	683196.42	999529.72	1082984.28	1083454.56
52.01	34 98918.72	674483.18	681855.97	999527.85	1082897.11	1083369.26
53.84	33 98914.45	673133.41	680520.82	999525.97	1082810.11	1083284.14
55.67	32 98910.17	671788.01	679190.95	999524.09	1082723.28	1083199.19
57.50	31 98905.88	670449.66	677866.32	999522.21	1082636.62	1083114.41
59.33	30 98901.58	669115.62	676546.91	999520.33	1082550.11	1083029.79
61.16	29 98897.28	667786.77	675232.68	999518.44	1082463.78	1082945.35
62.99	28 98892.97	666463.07	673923.60	999516.54	1082377.61	1082861.07
64.82	27 98888.65	665144.49	672619.65	999514.64	1082291.60	1082776.95
66.65	26 98884.32	663831.00	671320.79	999512.74	1082205.75	1082693.01
68.48	25 98879.98	662522.58	670026.99	999510.84	1082120.07	1082609.23
70.31	24 98875.63	661219.19	668738.22	999508.93	1082034.54	1082525.61
72.14	23 98871.28	659920.80	667454.46	999507.02	1081949.18	1082442.16
73.97	22 98866.92	658627.30	666175.68	999505.10	1081863.98	1082358.88
75.80	21 98862.55	657338.92	664901.84	999503.18	1081778.94	1082275.79
77.63	20 98858.17	656055.38	663632.93	999501.26	1081694.05	1082192.75
79.46	19 98853.78	654776.72	662368.60	999499.33	1081609.32	1082109.99
81.29	18 98849.38	653502.95	661109.73	999497.40	1081524.75	1082027.35
83.12	17 98844.98	652232.96	659855.40	999495.46	1081440.34	1081944.88
84.95	16 98840.57	650969.81	658605.87	999493.52	1081356.08	1081862.56
86.78	15 98836.15	649710.43	657361.12	999491.58	1081271.98	1081780.40
88.61	14 98831.72	648455.81	656121.13	999489.64	1081188.04	1081698.40
90.44	13 98827.28	647205.91	654884.86	999487.69	1081104.25	1081616.56
92.27	12 98822.83	645960.72	653655.28	999485.73	1081020.61	1081534.88
94.10	11 98818.38	644720.17	652429.38	999483.77	1080937.13	1081453.35
95.93	10 98813.92	643484.28	651208.12	999481.81	1080853.79	1081371.98
97.76	9 98809.45	642253.01	649991.48	999479.85	1080770.61	1081290.77
99.59	8 98804.97	641026.33	648779.44	999477.88	1080687.59	1081209.71
101.42	7 98800.48	639804.22	647571.95	999475.91	1080604.71	1081128.80
103.25	6 98795.98	638586.65	646369.01	999473.93	1080521.98	1081048.05
105.08	5 98791.48	637373.59	645170.59	999471.95	1080439.41	1080967.46
106.91	4 98786.97	636165.02	643976.66	999469.97	1080356.98	1080887.01
108.74	3 98782.45	634960.92	642787.19	999467.98	1080274.70	1080806.72
110.57	2 98777.92	633761.26	641602.16	999465.99	1080192.57	1080726.58
112.40	1 98773.38	632566.01	640421.54	999463.99	1080110.59	1080646.59
114.23	0 98768.83	631375.15	639245.32	999461.99	1080028.75	1080566.76

9	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
0	15643.45	15838.44	101246.51	919433.24	919971.25	1000538.01
1	15672.18	15868.26	101251.18	919512.93	920052.94	1000540.01
2	15700.91	15898.08	101255.86	919592.47	920134.49	1000542.02
3	15729.63	15927.91	101260.55	919671.86	920215.88	1000544.03
4	15758.36	15957.74	101265.25	919751.10	920297.14	1000546.04
5	15787.08	15987.57	101269.96	919830.19	920378.25	1000548.06
6	15815.81	16017.40	101274.67	919909.13	920459.22	1000550.08
7	15844.53	16047.24	101279.39	919987.93	920540.04	1000552.11
8	15873.25	16077.08	101284.12	920066.58	920620.72	1000554.13
9	15901.97	16106.92	101288.86	920145.09	920701.26	1000556.17
10	15930.69	16136.77	101293.61	920223.45	920781.65	1000558.20
11	15959.40	16166.62	101298.37	920301.67	920861.91	1000560.25
12	15988.12	16196.47	101303.14	920379.74	920942.03	1000562.29
13	16016.83	16226.32	101307.92	920457.66	921022.00	1000564.34
14	16045.55	16256.17	101312.71	920535.45	921101.84	1000566.39
15	16074.26	16286.03	101317.51	920613.09	921181.53	1000568.44
16	16102.97	16315.89	101322.31	920690.59	921261.09	1000570.50
17	16131.67	16345.76	101327.12	920767.95	921340.51	1000572.57
18	16160.38	16375.63	101331.94	920845.16	921419.80	1000574.63
19	16189.09	16405.50	101336.77	920922.24	921498.94	1000576.70
20	16217.79	16435.37	101341.61	920999.17	921577.95	1000578.78
21	16246.50	16465.25	101346.46	921075.97	921656.83	1000580.86
22	16275.20	16495.13	101351.32	921152.63	921735.56	1000582.94
23	16303.90	16525.01	101356.19	921229.14	921814.17	1000585.02
24	16332.60	16554.89	101361.07	921305.52	921892.64	1000587.11
25	16361.29	16584.78	101365.95	921381.76	921970.97	1000589.21
26	16389.99	16614.67	101370.84	921457.87	922049.17	1000591.30
27	16418.68	16644.56	101375.74	921533.84	922127.24	1000593.41
28	16447.38	16674.46	101380.64	921609.67	922205.18	1000595.51
29	16476.07	16704.36	101385.57	921685.36	922282.98	1000597.62
30	16504.76	16734.26	101390.50	921760.92	922360.65	1000599.73
31	16533.45	16764.16	101395.44	921836.35	922438.19	1000601.85
32	16562.14	16794.07	101400.39	921911.64	922515.61	1000603.97
33	16590.82	16823.98	101405.35	921986.80	922592.89	1000606.09
34	16619.51	16853.89	101410.32	922061.82	922670.04	1000608.22
35	16648.19	16883.81	101415.30	922136.71	922747.06	1000610.35
36	16676.87	16913.73	101420.29	922211.47	922823.95	1000612.48
37	16705.55	16943.65	101425.29	922286.09	922900.71	1000614.62
38	16734.23	16973.58	101430.29	922360.59	922977.35	1000616.76
39	16762.91	17003.51	101435.30	922434.95	923053.86	1000618.91
40	16791.59	17033.44	101440.32	922509.18	923130.24	1000621.06
41	16820.26	17063.37	101445.35	922583.28	923206.50	1000623.21
42	16848.94	17093.31	101450.39	922657.25	923282.62	1000625.37
43	16877.61	17123.25	101455.44	922731.10	923358.63	1000627.53
44	16906.28	17153.19	101460.50	922804.81	923434.51	1000629.70
45	16934.95	17183.14	101465.57	922878.39	923510.26	1000631.87
46	16963.62	17213.09	101470.64	922951.85	923585.89	1000634.04
47	16992.28	17243.04	101475.72	923025.18	923661.39	1000636.22
48	17020.95	17273.00	101480.81	923098.38	923736.78	1000638.40
49	17049.61	17302.96	101485.91	923171.45	923812.03	1000640.58
50	17078.28	17332.92	101491.02	923244.40	923887.17	1000642.77
51	17106.94	17362.88	101496.14	923317.22	923962.18	1000644.96
52	17135.60	17392.85	101501.27	923389.92	924037.08	1000647.15
53	17164.25	17422.82	101506.41	923462.49	924111.85	1000649.35
54	17192.91	17452.79	101511.56	923534.94	924186.50	1000651.56
55	17221.56	17482.77	101516.72	923607.26	924261.03	1000653.76
56	17250.22	17512.75	101521.89	923679.46	924335.43	1000655.97
57	17278.87	17542.73	101527.07	923751.53	924409.72	1000658.19
58	17307.52	17572.72	101532.26	923823.49	924483.89	1000660.41
59	17336.17	17602.71	101537.46	923895.32	924557.94	1000662.63
60	17364.82	17632.70	101542.67	923967.02	924631.88	1000664.85

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologarith. pro Tangente	Tornologarith. pro Secante
01	60 98768.83	631375.15	639245.32	999461.99	1080018.75	1080566.76
01	59 98764.28	630188.66	638073.47	999459.99	1079947.06	1080487.07
02	58 98759.72	629006.51	636905.95	999457.98	1079865.51	1080407.53
03	57 98755.15	627828.68	635742.76	999455.97	1079784.12	1080328.14
04	56 98750.57	626655.14	634583.86	999453.96	1079702.86	1080248.90
06	55 98745.98	625485.88	633429.23	999451.94	1079621.75	1080169.81
08	54 98741.38	624320.86	632273.84	999449.92	1079540.78	1080090.87
11	53 98736.77	623160.07	631132.69	999447.89	1079459.96	1080012.07
13	52 98732.16	622003.47	629990.73	999445.87	1079379.28	1079933.42
17	51 98727.54	620851.06	628852.95	999443.83	1079298.74	1079854.91
20	50 98722.91	619702.79	627719.33	999441.80	1079218.35	1079776.55
25	49 98718.27	618558.67	626589.84	999439.75	1079138.09	1079698.33
29	48 98713.62	617418.65	625454.46	999437.71	1079057.97	1079620.26
34	47 98708.97	616282.72	624334.16	999435.66	1078978.00	1079542.34
39	46 98704.31	615150.85	623225.94	999433.61	1078898.16	1079464.55
44	45 98699.64	614023.23	622112.75	999431.56	1078818.47	1079386.91
50	44 98694.96	612899.23	621003.59	999429.50	1078738.91	1079309.41
57	43 98690.27	611779.43	619908.43	999427.43	1078659.49	1079232.05
63	42 98685.57	610663.60	618797.25	999425.37	1078580.20	1079154.84
70	41 98680.86	609551.74	617700.03	999423.30	1078501.06	1079077.76
78	40 98676.15	608443.81	616606.74	999421.22	1078422.05	1079000.83
86	39 98671.43	607339.79	615517.36	999419.14	1078343.17	1078924.03
94	38 98666.70	606239.67	614431.89	999417.06	1078264.44	1078847.37
02	37 98661.96	605143.43	613350.28	999414.98	1078185.83	1078770.86
11	36 98657.21	604051.03	612272.53	999412.89	1078107.36	1078694.48
21	35 98652.46	602962.47	611198.61	999410.79	1078029.03	1078618.24
30	34 98647.70	601877.72	610128.50	999408.70	1077950.83	1078542.13
41	33 98642.93	600796.76	609062.19	999406.59	1077872.76	1078466.16
51	32 98638.15	599719.57	607999.64	999404.49	1077794.82	1078390.33
62	31 98633.36	598546.14	606940.85	999402.38	1077717.02	1078314.64
73	30 98628.56	597376.44	605885.80	999400.27	1077639.35	1078239.08
85	29 98623.75	596210.45	604834.45	999398.15	1077561.81	1078163.65
97	28 98618.94	595044.15	603786.80	999396.03	1077484.39	1078088.36
09	27 98614.12	593879.52	602742.82	999393.91	1077407.11	1078013.20
23	26 98609.29	592713.55	601702.50	999391.78	1077329.96	1077938.18
35	25 98604.45	591548.22	600666.81	999389.65	1077252.94	1077863.29
48	24 98599.60	590385.50	599632.74	999387.52	1077176.05	1077788.53
62	23 98594.74	589219.38	598603.26	999385.38	1077099.29	1077713.91
76	22 98589.88	588059.84	597577.37	999383.24	1077022.65	1077639.41
91	21 98585.01	586895.86	596555.04	999381.09	1076946.14	1077565.05
06	20 98580.13	585738.42	595536.25	999378.94	1076869.76	1077490.82
21	19 98575.24	584580.51	594520.98	999376.79	1076793.50	1077416.72
37	18 98570.34	583424.10	593509.22	999374.63	1076717.38	1077342.75
53	17 98565.44	582269.17	592500.95	999372.47	1076641.37	1077268.90
70	16 98560.53	581115.72	591496.14	999370.30	1076565.49	1077195.19
87	15 98555.61	580065.72	590494.79	999368.13	1076489.74	1077121.61
04	14 98550.68	579019.15	589496.88	999365.96	1076414.11	1077048.15
22	13 98545.74	577974.00	588502.38	999363.78	1076338.61	1076974.82
40	12 98540.79	576933.25	587511.28	999361.60	1076263.22	1076901.62
58	11 98535.83	575893.88	586523.56	999359.42	1076187.97	1076828.55
77	10 98530.87	574856.88	585539.20	999357.23	1076112.83	1076755.60
96	9 98525.90	573821.22	584558.20	999355.04	1076037.82	1076682.78
15	8 98520.92	572786.62	583580.53	999352.85	1075962.92	1076610.08
35	7 98515.93	571753.99	582606.17	999350.65	1075888.15	1076537.51
56	6 98510.93	570724.16	581635.10	999348.44	1075813.50	1076465.06
76	5 98505.92	569697.73	580667.32	999346.24	1075738.97	1076392.74
97	4 98500.91	568674.56	579702.80	999344.03	1075664.57	1076320.54
19	3 98495.89	567653.62	578741.53	999341.81	1075590.28	1076248.47
41	2 98490.86	566634.94	577783.50	999339.59	1075516.11	1076176.51
63	1 98485.82	565618.67	576828.67	999337.37	1075442.06	1076104.68
85	0 98480.77	564612.18	575877.05	999335.15	1075368.12	1076032.98

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10	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	17364.82	17632.70	101542.67	923967.02	924631.88	1000664.85
1	17393.46	17662.69	101547.88	924038.61	924705.69	1000667.08
2	17422.11	17692.69	101553.10	924110.07	924779.39	1000669.32
3	17450.75	17722.69	101558.33	924181.41	924852.97	1000671.55
4	17479.39	17752.69	101563.57	924252.64	924926.43	1000673.79
5	17508.03	17782.70	101568.82	924323.74	924999.78	1000676.04
6	17536.67	17812.71	101574.08	924394.72	925073.01	1000678.29
7	17565.31	17842.72	101579.35	924465.58	925146.12	1000680.54
8	17593.95	17872.74	101584.63	924536.32	925219.12	1000682.80
9	17622.58	17902.76	101589.92	924606.95	925292.00	1000685.06
10	17651.21	17932.78	101595.21	924677.46	925364.77	1000687.32
11	17679.84	17962.81	101600.51	924747.84	925437.43	1000689.59
12	17708.47	17992.84	101605.82	924818.11	925509.97	1000691.86
13	17737.10	18022.87	101611.14	924888.27	925582.40	1000694.13
14	17765.73	18052.91	101616.47	924958.30	925654.72	1000696.41
15	17794.35	18082.95	101621.81	925028.22	925726.92	1000698.69
16	17822.98	18112.99	101627.16	925098.03	925799.01	1000700.98
17	17851.60	18143.03	101632.52	925167.72	925870.99	1000703.27
18	17880.22	18173.08	101637.89	925237.29	925942.85	1000705.56
19	17908.84	18203.13	101643.27	925306.75	926014.68	1000707.86
20	17937.46	18233.18	101648.66	925376.09	926086.25	1000710.16
21	17966.07	18263.24	101654.06	925445.32	926157.79	1000712.47
22	17994.69	18293.30	101659.46	925514.44	926229.21	1000714.78
23	18023.30	18323.36	101664.87	925583.44	926300.53	1000717.09
24	18051.91	18353.43	101670.29	925652.33	926371.73	1000719.41
25	18080.52	18383.50	101675.72	925721.10	926442.83	1000721.73
26	18109.13	18413.57	101681.16	925789.77	926513.82	1000724.05
27	18137.74	18443.65	101686.61	925858.32	926584.70	1000726.38
28	18166.35	18473.73	101692.07	925926.76	926655.47	1000728.71
29	18194.95	18503.81	101697.54	925995.09	926726.13	1000731.05
30	18223.55	18533.90	101703.02	926063.30	926796.69	1000733.39
31	18252.15	18563.99	101708.51	926131.41	926867.14	1000735.73
32	18280.75	18594.08	101714.01	926199.41	926937.49	1000738.08
33	18309.35	18624.18	101719.52	926267.29	927007.72	1000740.43
34	18337.95	18654.28	101725.04	926335.07	927077.86	1000742.78
35	18366.54	18684.38	101730.56	926402.74	927147.88	1000745.14
36	18395.13	18714.49	101736.09	926470.30	927217.80	1000747.50
37	18423.73	18744.60	101741.63	926537.75	927287.62	1000749.87
38	18452.32	18774.71	101747.18	926605.09	927357.33	1000752.24
39	18480.91	18804.83	101752.74	926672.32	927426.94	1000754.61
40	18509.49	18834.95	101758.31	926739.45	927496.44	1000756.99
41	18538.08	18865.07	101763.89	926806.47	927565.84	1000759.37
42	18566.66	18895.20	101769.48	926873.38	927635.14	1000761.75
43	18595.24	18925.33	101775.08	926940.19	927704.34	1000764.15
44	18623.82	18955.46	101780.69	927006.89	927773.43	1000766.54
45	18652.40	18985.59	101786.31	927073.48	927842.42	1000768.94
46	18680.98	19015.73	101791.94	927139.97	927911.31	1000771.34
47	18709.56	19045.87	101797.58	927206.35	927980.09	1000773.74
48	18738.13	19076.02	101803.22	927272.63	928048.78	1000776.15
49	18766.70	19106.17	101808.87	927338.80	928117.36	1000778.56
50	18795.27	19136.32	101814.53	927404.87	928185.85	1000780.98
51	18823.84	19166.48	101820.20	927470.83	928254.23	1000783.40
52	18852.41	19196.64	101825.88	927536.69	928322.51	1000785.82
53	18880.98	19226.80	101831.57	927602.45	928390.70	1000788.25
54	18909.54	19256.96	101837.27	927668.11	928458.78	1000790.68
55	18938.11	19287.13	101842.98	927733.66	928526.77	1000793.11
56	18966.67	19317.30	101848.70	927799.11	928594.66	1000795.55
57	18995.23	19347.48	101854.43	927864.45	928662.45	1000797.99
58	19023.79	19377.66	101860.17	927929.70	928730.14	1000800.44
59	19052.34	19407.84	101865.92	927994.84	928797.73	1000802.89
60	19080.90	19438.03	101871.68	928059.88	928865.23	1000805.34

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
85	60 98480.77	567128.18	575877.05	999335.15	1075368.12	1076032.58
84	59 98475.71	566165.09	574928.61	999332.92	1075294.31	1075961.59
83	58 98470.65	565205.16	573983.33	999330.68	1075220.61	1075889.23
82	57 98465.58	564248.38	573041.21	999328.45	1075147.03	1075818.59
81	56 98460.50	563294.74	572102.23	999326.21	1075073.57	1075747.16
80	55 98455.41	562344.21	571166.36	999323.96	1075000.22	1075676.26
79	54 98450.31	561396.80	570233.60	999321.71	1074926.99	1075605.28
78	53 98445.21	560452.47	569303.93	999319.46	1074853.88	1075534.42
77	52 98440.10	559511.21	568377.34	999317.20	1074780.88	1075463.68
76	51 98434.98	558573.02	567453.80	999314.94	1074708.00	1075393.05
75	50 98429.85	557637.86	566533.31	999312.68	1074635.23	1075322.54
74	49 98424.71	556705.74	565615.84	999310.41	1074562.57	1075252.16
73	48 98419.56	555776.63	564701.40	999308.14	1074490.03	1075181.89
72	47 98414.40	554850.52	563789.95	999305.87	1074417.60	1075111.73
71	46 98409.24	553927.40	562881.48	999303.59	1074345.28	1075041.70
70	45 98404.07	553007.24	561975.99	999301.31	1074273.08	1074971.78
69	44 98398.89	552090.05	561073.45	999299.02	1074200.99	1074901.97
68	43 98393.70	551175.79	560173.86	999296.73	1074129.01	1074832.28
67	42 98388.50	550264.46	559277.19	999294.44	1074057.15	1074762.71
66	41 98383.29	549356.04	558383.43	999292.14	1073985.39	1074693.25
65	40 98378.08	548450.52	557492.58	999289.84	1073913.75	1074623.91
64	39 98372.86	547547.88	556604.60	999287.53	1073842.21	1074554.68
63	38 98367.63	546648.12	555719.50	999285.22	1073770.79	1074485.56
62	37 98362.39	545751.21	554837.26	999282.91	1073699.47	1074416.56
61	36 98357.14	544857.15	553957.86	999280.59	1073628.27	1074347.67
60	35 98351.89	543965.92	553081.29	999278.27	1073557.17	1074278.90
59	34 98346.63	543077.50	552207.54	999275.95	1073486.18	1074210.25
58	33 98341.36	542191.88	551336.59	999273.62	1073415.30	1074141.68
57	32 98336.08	541309.06	550468.43	999271.29	1073344.53	1074073.24
56	31 98330.79	540429.01	549603.05	999268.95	1073273.87	1074004.91
55	30 98325.43	539551.72	548740.43	999266.61	1073203.31	1073936.70
54	29 98320.13	538677.18	547880.55	999264.27	1073132.86	1073868.59
53	28 98314.87	537805.38	547023.42	999261.92	1073062.51	1073800.59
52	27 98309.55	536936.30	546169.01	999259.57	1072992.28	1073732.71
51	26 98304.22	536069.93	545317.31	999257.22	1072922.14	1073664.93
50	25 98298.88	535206.26	544468.31	999254.86	1072852.12	1073597.26
49	24 98293.53	534345.27	543621.90	999252.50	1072782.20	1073529.70
48	23 98288.17	533486.96	542778.35	999250.13	1072712.38	1073462.25
47	22 98282.81	532631.31	541937.37	999247.76	1072642.67	1073394.91
46	21 98277.44	531778.30	541099.03	999245.39	1072573.06	1073327.68
45	20 98272.06	530927.93	540263.33	999243.01	1072503.56	1073260.55
44	19 98266.67	530080.18	539430.26	999240.63	1072434.16	1073193.52
43	18 98261.27	529235.05	538599.79	999238.24	1072364.86	1073126.62
42	17 98255.87	528392.51	537771.92	999235.85	1072295.66	1073059.81
41	16 98250.46	527552.55	536946.64	999233.46	1072226.57	1072993.11
40	15 98245.04	526715.17	536123.93	999231.06	1072157.58	1072926.52
39	14 98239.61	525880.35	535303.79	999228.66	1072088.69	1072860.03
38	13 98234.17	525048.09	534486.20	999226.26	1072019.91	1072793.65
37	12 98228.72	524218.36	533671.14	999223.85	1071951.22	1072727.37
36	11 98223.27	523391.16	532858.61	999221.44	1071882.64	1072661.20
35	10 98217.81	522566.47	532048.60	999219.02	1071814.15	1072595.13
34	9 98212.34	521744.28	531241.09	999216.60	1071745.77	1072529.17
33	8 98206.86	520924.59	530436.08	999214.18	1071677.49	1072463.31
32	7 98201.37	520107.38	529633.54	999211.75	1071609.30	1072397.55
31	6 98195.87	519292.64	528833.47	999209.32	1071541.22	1072331.89
30	5 98190.36	518480.35	528035.87	999206.89	1071473.23	1072266.34
29	4 98184.85	517670.51	527240.70	999204.45	1071405.34	1072200.89
28	3 98179.33	516863.11	526447.98	999202.01	1071337.55	1072135.53
27	2 98173.80	516058.13	525657.68	999199.56	1071269.86	1072070.30
26	1 98168.26	515255.57	524869.79	999197.11	1071202.27	1072005.16
25	0 98162.71	514455.40	524084.31	999194.66	1071134.77	1071940.12

I	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	19780.90	19438.03	101871.68	928059.88	928865.23	1000805.34
1	19109.45	19468.22	101877.44	928124.83	928932.63	1000807.80
2	19138.00	19498.41	101883.21	928189.67	928999.93	1000810.26
3	19166.55	19528.61	101888.99	928254.41	929067.13	1000812.73
4	19195.10	19558.81	101894.78	928319.05	929134.24	1000815.20
5	19223.65	19589.01	101900.58	928383.59	929201.26	1000817.67
6	19252.20	19619.22	101906.39	928448.03	929268.17	1000820.14
7	19280.74	19649.43	101912.21	928512.37	929335.07	1000822.63
8	19309.28	19679.64	101918.04	928576.61	929401.72	1000825.11
9	19337.82	19709.86	101923.88	928640.76	929468.36	1000827.60
10	19366.36	19740.08	101929.73	928704.80	929534.89	1000830.09
11	19394.90	19770.30	101935.59	928768.75	929601.34	1000832.50
12	19423.44	19800.53	101941.46	928832.60	929667.09	1000835.08
13	19451.97	19830.76	101947.34	928896.36	929733.95	1000837.59
14	19480.50	19861.00	101953.23	928960.01	929800.11	1000840.10
15	19509.03	19891.24	101959.12	929023.57	929866.18	1000842.61
16	19537.56	19921.48	101965.02	929087.04	929932.16	1000845.12
17	19566.09	19951.72	101970.93	929150.40	929998.04	1000847.64
18	19594.61	19981.97	101976.85	929213.67	930063.83	1000850.16
19	19623.14	20012.22	101982.78	929276.85	930129.54	1000852.69
20	19651.66	20042.48	101988.72	929339.03	930195.14	1000855.2
21	19680.18	20072.74	101994.67	929402.01	930260.66	1000857.75
22	19708.70	20103.00	102000.63	929465.80	930326.09	1000860.20
23	19737.22	20133.27	102006.60	929528.59	930391.43	1000862.83
24	19765.73	20163.54	102012.58	929591.29	930456.67	1000865.38
25	19794.25	20193.81	102018.57	929653.90	930521.83	1000867.93
26	19822.76	20224.09	102024.57	929716.41	930586.89	1000870.4
27	19851.27	20254.37	102030.58	929778.83	930651.87	1000873.04
28	19879.78	20284.65	102036.60	929841.16	930716.75	1000875.60
29	19908.20	20314.94	102042.63	929903.30	930781.55	1000878.16
30	19936.70	20345.23	102048.67	929965.53	930846.26	1000880.73
31	19965.30	20375.52	102054.71	930027.58	930910.88	1000883.30
32	19993.80	20405.82	102060.76	930089.53	930975.41	1000885.88
33	20022.30	20436.12	102066.82	930151.40	931039.85	1000888.46
34	20050.80	20466.43	102072.89	930213.17	931104.21	1000891.04
35	20079.30	20496.74	102078.97	930274.85	931168.48	1000893.63
36	20107.79	20527.05	102085.06	930336.44	931232.66	1000896.22
37	20136.29	20557.37	102091.16	930397.94	931296.75	1000898.81
38	20164.78	20587.69	102097.27	930459.34	931360.76	1000901.41
39	20193.27	20618.01	102103.39	930520.66	931424.68	1000904.01
40	20221.76	20648.34	102109.52	930581.89	931488.51	1000906.62
41	20250.24	20678.67	102115.66	930643.03	931552.26	1000909.23
42	20278.73	20709.00	102121.81	930704.07	931615.52	1000911.85
43	20307.21	20739.34	102127.97	930765.03	931679.50	1000914.47
44	20335.60	20769.68	102134.14	930825.90	931742.99	1000917.09
45	20364.17	20800.03	102140.32	930886.68	931806.40	1000919.71
46	20392.65	20830.38	102146.50	930947.37	931869.72	1000922.34
47	20421.13	20860.73	102152.69	931007.98	931932.95	1000924.98
48	20449.61	20891.09	102158.89	931068.49	931996.11	1000927.61
49	20478.08	20921.45	102165.10	931128.92	932059.18	1000930.26
50	20506.55	20951.81	102171.32	931189.26	932122.16	1000932.90
51	20535.02	20982.18	102177.55	931249.51	932185.06	1000935.55
52	20563.49	21012.55	102183.79	931309.68	932247.88	1000938.20
53	20591.95	21042.93	102190.04	931369.76	932310.61	1000940.86
54	20620.42	21073.31	102196.30	931429.75	932373.27	1000943.52
55	20648.88	21103.69	102202.57	931489.65	932435.84	1000946.18
56	20677.34	21134.07	102208.85	931549.47	932498.32	1000948.85
57	20705.80	21164.46	102215.14	931609.21	932560.73	1000951.52
58	20734.26	21194.85	102221.44	931668.85	932623.05	1000954.20
59	20762.71	21225.25	102227.75	931728.41	932685.29	1000956.88
60	20791.17	21255.65	102234.07	931787.89	932747.45	1000959.56

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologariſh. pro Tangente	Tomologariſh. pro Secante
34	60	98162.71	514455.40	524084.31	999194.66	1071134.77
07.80	59	98157.16	513657.63	523301.21	999192.20	1071067.37
10.26	58	98151.60	512862.24	522520.50	999189.74	1071000.07
12.73	57	98146.03	512069.21	521742.16	999187.27	1070932.87
15.20	56	98140.45	511278.55	520966.18	999184.80	1070865.76
17.67	55	98134.86	510490.24	520192.54	999182.33	1070798.74
20.14	54	98129.26	509704.26	519421.25	999179.86	1070731.83
22.63	53	98123.66	508920.61	518652.28	999177.37	1070665.00
25.11	52	98118.05	508139.28	517885.63	999174.89	1070598.28
27.60	51	98112.43	507360.25	517121.28	999172.40	1070531.64
30.09	50	98106.80	506583.52	516359.24	999169.91	1070465.11
32.50	49	98101.16	505809.07	515599.48	999167.41	1070398.66
35.08	48	98095.51	505036.90	514841.99	999164.92	1070332.31
37.59	47	98089.86	504267.00	514086.77	999162.41	1070266.05
40.10	46	98084.20	503499.35	513333.81	999159.90	1070199.89
42.61	45	98078.53	502733.95	512583.09	999157.39	1070133.82
45.12	44	98072.85	501970.78	511834.61	999154.88	1070067.84
47.64	43	98067.16	501209.84	511088.35	999152.36	1070001.96
50.16	42	98061.46	500451.11	510344.31	999149.84	1069936.17
52.69	41	98055.76	499694.59	509602.48	999147.31	1069870.46
55.2	40	98050.05	498940.27	508862.84	999144.78	1069804.86
57.75	39	98044.33	498188.13	508125.39	999142.25	1069739.34
60.29	38	98038.60	497438.17	507390.12	999139.71	1069673.91
62.83	37	98032.86	496690.37	506657.01	999137.17	1069608.57
65.38	36	98027.11	495944.74	505926.06	999134.62	1069543.33
67.93	35	98021.36	495201.25	505197.26	999132.07	1069478.17
70.4	34	98015.60	494459.90	504470.60	999129.52	1069413.11
72.94	33	98009.83	493720.68	503746.07	999126.96	1069348.13
75.49	32	98004.05	492983.58	503023.67	999124.40	1069283.23
78.04	31	97998.26	492248.59	502303.37	999121.84	1069218.45
80.59	30	97992.47	491515.70	501585.17	999119.27	1069153.74
83.14	29	97986.67	490784.91	500869.07	999116.70	1069089.12
85.69	28	97980.86	490056.20	500155.05	999114.12	1069024.50
88.24	27	97975.04	489329.56	499443.11	999111.54	1068960.15
90.79	26	97969.21	488604.99	498733.23	999108.96	1068895.79
93.34	25	97963.37	487882.48	498025.41	999106.37	1068831.52
95.89	24	97957.52	487162.01	497319.64	999103.78	1068767.34
98.44	23	97951.67	486443.59	496615.91	999101.19	1068703.25
100.99	22	97945.81	485727.19	495914.21	999098.59	1068639.24
103.54	21	97939.94	485012.82	495214.53	999095.98	1068575.32
106.09	20	97934.06	484300.45	494516.87	999093.38	1068511.49
108.64	19	97928.17	483590.10	493821.20	999090.77	1068447.74
111.19	18	97922.28	482881.74	493127.54	999088.15	1068384.08
113.74	17	97916.38	482175.36	492435.86	999085.53	1068320.50
116.29	16	97910.47	481470.96	491746.16	999082.91	1068257.01
118.84	15	97904.55	480768.54	491058.44	999080.29	1068193.60
121.39	14	97898.62	480068.08	490372.67	999077.66	1068130.28
123.94	13	97892.68	479369.57	489688.86	999075.02	1068067.05
126.49	12	97886.74	478673.00	489007.00	999072.39	1068003.89
129.04	11	97880.79	477978.37	488327.07	999069.74	1067940.82
131.59	10	97874.83	477285.67	487649.07	999067.10	1067877.84
134.14	9	97868.86	476594.90	486972.99	999064.45	1067814.94
136.69	8	97862.88	475906.03	486298.83	999061.80	1067752.12
139.24	7	97856.89	475219.07	485626.57	999059.14	1067689.39
141.79	6	97850.90	474534.01	484956.21	999056.48	1067626.73
144.34	5	97844.90	473850.83	484287.74	999053.82	1067564.16
146.89	4	97838.89	473169.54	483621.14	999051.15	1067501.68
149.44	3	97832.87	472490.12	482956.43	999048.48	1067439.27
151.99	2	97826.84	471812.56	482293.57	999045.80	1067376.95
154.54	1	97820.80	471136.86	481632.58	999043.12	1067314.71
157.09	0	97814.76	470463.01	480973.43	999040.44	1067252.55

1 2	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	20491.17	21255.65	102234.07	931787.89	932747.45	1000959.56
1	20819.62	21286.06	102240.40	931847.28	932809.53	1000962.25
2	20848.07	21316.47	102246.73	931906.59	932871.53	1000964.94
3	20876.52	21346.88	102253.07	931965.81	932933.45	1000967.63
4	20904.97	21377.20	102259.42	932024.95	932995.28	1000972.33
5	20933.41	21407.72	102265.78	932084.00	933057.04	1000973.03
6	20961.86	21438.14	102272.15	932142.97	933118.72	1000975.74
7	20990.30	21468.57	102278.53	932201.86	933180.31	1000978.45
8	21018.74	21499.00	102284.92	932260.66	933241.83	1000981.17
9	21047.18	21529.44	102291.32	932319.38	933303.27	1000983.88
10	21075.61	21559.88	102297.73	932378.02	933364.63	1000986.61
11	21104.05	21590.32	102304.15	932436.57	933425.91	1000989.33
12	21132.48	21620.77	102310.58	932495.05	933487.11	1000992.06
13	21160.91	21651.22	102317.02	932553.44	933548.23	1000994.79
14	21189.34	21681.67	102323.47	932611.74	933609.27	1000997.51
15	21217.77	21712.13	102329.93	932669.97	933670.24	1001000.27
16	21246.19	21742.59	102336.40	932728.11	933731.13	1001003.02
17	21274.62	21773.05	102342.88	932786.17	933791.94	1001005.77
18	21303.04	21803.53	102349.37	932844.16	933852.67	1001008.52
19	21331.46	21834.00	102355.87	932902.06	933913.33	1001011.27
20	21359.88	21864.48	102362.38	932959.88	933973.91	1001014.03
21	21388.29	21894.96	102368.90	933017.61	934034.41	1001016.80
22	21416.71	21925.44	102375.43	933075.27	934094.81	1001019.57
23	21445.12	21955.93	102381.96	933132.85	934155.10	1001022.34
24	21473.53	21986.42	102388.50	933190.35	934215.46	1001025.11
25	21501.94	22016.92	102395.05	933247.77	934275.66	1001027.89
26	21530.35	22047.42	102401.61	933305.11	934335.78	1001030.68
27	21558.76	22077.93	102408.18	933362.37	934395.83	1001033.46
28	21587.16	22108.44	102414.76	933419.55	934455.86	1001036.26
29	21615.56	22138.95	102421.35	933476.65	934515.70	1001039.05
30	21643.96	22169.47	102427.95	933533.68	934575.52	1001041.85
31	21672.36	22199.99	102434.56	933590.62	934635.27	1001044.65
32	21700.76	22230.51	102441.18	933647.40	934694.94	1001047.46
33	21729.15	22261.04	102447.81	933704.28	934754.54	1001050.27
34	21757.54	22291.57	102454.45	933760.99	934814.07	1001053.08
35	21785.93	22322.11	102461.10	933817.62	934873.52	1001055.90
36	21814.32	22352.65	102467.76	933874.18	934932.90	1001058.72
37	21842.71	22383.19	102474.43	933930.65	934992.20	1001061.55
38	21871.10	22413.74	102481.11	933987.06	935051.43	1001064.38
39	21899.48	22444.29	102487.80	934043.38	935110.59	1001067.21
40	21927.86	22474.85	102494.49	934099.63	935169.68	1001070.05
41	21956.24	22505.41	102501.19	934155.80	935228.69	1001072.89
42	21984.62	22535.97	102507.90	934211.90	935287.63	1001075.73
43	22013.00	22566.54	102514.62	934267.92	935346.50	1001078.58
44	22041.37	22597.11	102521.35	934323.86	935405.30	1001081.44
45	22069.74	22627.69	102528.09	934379.73	935464.02	1001084.29
46	22098.11	22658.27	102534.84	934435.52	935522.67	1001087.15
47	22126.48	22688.85	102541.60	934491.24	935581.26	1001090.02
48	22154.85	22719.44	102548.37	934546.88	935639.77	1001092.89
49	22183.22	22750.03	102555.15	934602.45	935698.21	1001095.76
50	22211.58	22780.63	102561.94	934657.94	935756.58	1001098.63
51	22239.94	22811.23	102568.74	934713.36	935814.87	1001101.51
52	22268.30	22841.83	102575.55	934768.70	935873.10	1001104.40
53	22296.66	22872.44	102582.37	934823.97	935931.26	1001107.29
54	22325.01	22903.05	102589.20	934879.17	935989.35	1001110.18
55	22353.37	22933.67	102596.04	934934.29	936047.36	1001113.07
56	22381.72	22964.29	102602.89	934989.34	936105.31	1001115.97
57	22410.07	22994.92	102609.75	935044.32	936163.19	1001118.87
58	22438.41	23025.55	102616.62	935099.22	936221.09	1001121.78
59	22466.76	23056.18	102623.50	935154.05	936278.74	1001124.69
60	22495.11	23086.82	102630.39	935208.80	936336.41	1001127.61

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
60	97814.76	479463.01	480973.43	999040.44	106724.55	1068212.11
59	97808.71	469791.00	480316.13	999037.75	1067190.47	1068152.72
58	97802.65	469120.83	479660.66	999035.06	1067148.47	1068093.41
57	97796.58	468452.48	479007.03	999032.37	1067106.55	1068034.19
56	97790.50	467785.95	478355.20	999029.67	1067064.71	1067975.05
55	97784.41	467121.24	477705.19	999026.97	1067022.96	1067916.00
54	97778.32	466458.31	477056.99	999024.26	1066981.28	1067857.03
53	97772.22	465797.21	476410.58	999021.55	1066939.69	1067798.14
52	97766.11	465137.88	475765.06	999018.83	1066898.17	1067739.34
51	97759.99	464480.34	475123.12	999016.12	1066856.73	1067680.62
50	97753.86	463824.57	474482.06	999013.39	1066815.37	1067621.98
49	97747.73	463170.56	473842.77	999010.67	1066774.09	1067563.43
48	97741.59	462518.32	473205.23	999007.94	1066732.89	1067504.95
47	97735.44	461867.83	472569.45	999005.21	1066691.77	1067446.56
46	97729.28	461219.08	471935.42	999002.47	1066650.73	1067388.26
45	97723.11	460572.07	471303.13	998999.73	1066609.76	1067330.03
44	97716.93	459926.80	470672.56	998996.98	1066568.87	1067271.89
43	97710.75	459283.25	470043.72	998994.23	1066528.06	1067213.83
42	97704.56	458641.41	469416.60	998991.48	1066487.33	1067155.84
41	97698.36	458001.29	468791.19	998988.73	1066446.67	1067097.94
40	97692.15	457362.87	468167.48	998985.97	1066406.09	1067040.12
39	97685.93	456726.14	467545.48	998983.20	1066365.59	1066982.39
38	97679.70	456091.11	466925.16	998980.43	1066325.16	1066924.73
37	97673.47	455457.76	466306.52	998977.66	1066284.81	1066867.15
36	97667.23	454826.08	465689.56	998974.89	1066244.54	1066809.65
35	97660.98	454196.08	465074.27	998972.11	1066204.34	1066752.23
34	97654.72	453567.73	464460.64	998969.32	1066164.22	1066694.89
33	97648.45	452941.05	463848.67	998966.54	1066124.17	1066637.63
32	97642.17	452316.01	463238.35	998963.74	1066084.20	1066580.45
31	97635.89	451692.61	462629.67	998960.95	1066044.30	1066523.35
30	97629.60	451070.85	462022.63	998958.15	1066004.48	1066466.32
29	97623.30	450450.72	461417.22	998955.35	1065964.73	1066409.38
28	97616.99	449832.21	460813.43	998952.54	1065925.06	1066352.57
27	97610.67	449215.32	460211.26	998949.73	1065885.46	1066295.72
26	97604.35	448600.04	459610.70	998946.92	1065845.93	1066239.01
25	97598.02	447986.36	459011.74	998944.10	1065806.48	1066182.38
24	97591.68	447374.28	458414.39	998941.28	1065767.10	1066125.82
23	97585.33	446763.79	457818.62	998938.45	1065727.80	1066069.35
22	97578.97	446154.89	457224.44	998935.62	1065688.57	1066012.94
21	97572.60	445547.56	456631.85	998932.79	1065649.41	1065956.61
20	97566.23	444941.81	456040.80	998929.95	1065610.32	1065900.37
19	97559.85	444337.62	455451.34	998927.11	1065571.31	1065844.20
18	97553.46	443734.99	454863.44	998924.27	1065532.37	1065788.10
17	97547.06	443133.92	454277.09	998921.42	1065493.50	1065732.08
16	97540.65	442534.39	453692.29	998918.56	1065454.70	1065676.14
15	97534.23	441936.41	453109.03	998915.71	1065415.98	1065620.27
14	97527.81	441339.06	452527.30	998912.85	1065377.33	1065564.43
13	97521.38	440745.04	451947.11	998909.98	1065338.74	1065508.76
12	97514.94	440151.64	451368.44	998907.11	1065300.23	1065453.12
11	97508.49	439559.76	450791.19	998904.24	1065261.79	1065397.55
10	97502.03	438969.40	450215.65	998901.37	1065223.42	1065342.06
9	97495.56	438380.54	449641.52	998898.49	1065185.13	1065286.64
8	97489.09	437793.17	449068.89	998895.60	1065146.90	1065231.30
7	97482.61	437207.31	448497.75	998892.71	1065108.74	1065176.03
6	97476.11	436622.93	447928.10	998889.82	1065070.65	1065120.83
5	97469.61	436040.03	447359.93	998886.93	1065032.64	1065065.71
4	97463.11	435458.61	446793.24	998884.03	1065094.69	1065010.66
3	97456.60	434878.66	446228.03	998881.13	1065056.81	1064955.68
2	97450.08	434300.18	445664.28	998878.22	1065018.90	1064900.78
1	97443.55	433723.16	445101.98	998875.31	1064981.26	1064845.95
0	97437.01	433147.59	444541.45	998872.39	1064943.59	1064791.20

13	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
0	22495.11	23086.82	102630.39	935208.80	936336.41	1001127.61
1	22523.45	23117.46	102637.29	935263.49	936394.01	1001130.53
2	22551.79	23148.11	102644.20	935318.10	936451.55	1001133.45
3	22580.13	23178.76	102651.12	935372.64	936509.01	1001136.37
4	22608.46	23209.41	102658.05	935427.10	936566.41	1001139.30
5	22636.80	23240.07	102664.99	935481.50	936623.74	1001142.24
6	22665.13	23270.73	102671.94	935535.82	936681.00	1001145.18
7	22693.46	23301.40	102678.90	935590.07	936738.19	1001148.12
8	22721.79	23332.07	102685.87	935644.26	936795.32	1001151.06
9	22750.12	23362.74	102692.84	935698.36	936852.38	1001154.01
10	22778.44	23393.42	102699.82	935752.40	936909.37	1001156.97
11	22806.77	23424.10	102706.81	935806.27	936966.29	1001159.92
12	22835.09	23454.79	102713.81	935860.37	937023.15	1001162.88
13	22863.41	23485.48	102720.82	935914.09	937079.94	1001165.85
14	22891.72	23516.17	102727.84	935967.85	937136.67	1001168.82
15	22920.04	23546.87	102734.87	936021.54	937193.33	1001171.79
16	22948.35	23577.58	102741.91	936075.15	937249.92	1001174.77
17	22976.66	23608.29	102748.96	936128.70	937306.45	1001177.75
18	23004.97	23639.00	102756.02	936182.17	937362.91	1001180.73
19	23033.28	23669.72	102763.09	936235.58	937419.30	1001183.72
20	23061.59	23700.44	102770.17	936288.52	937475.63	1001186.71
21	23089.89	23731.16	102777.26	936342.19	937531.90	1001189.71
22	23118.19	23761.89	102784.36	936395.39	937588.10	1001192.71
23	23146.49	23792.62	102791.47	936448.52	937644.23	1001195.71
24	23174.79	23823.36	102798.59	936501.58	937700.39	1001198.72
25	23203.09	23854.10	102805.72	936554.58	937756.31	1001201.73
26	23231.38	23884.85	102812.86	936607.50	937812.25	1001204.75
27	23259.67	23915.60	102820.01	936660.36	937868.13	1001207.77
28	23287.96	23946.35	102827.17	936713.15	937923.94	1001210.79
29	23316.25	23977.11	102834.34	936765.87	937979.69	1001213.82
30	23344.54	24007.87	102841.52	936818.53	938035.37	1001216.85
31	23372.82	24038.64	102848.71	936871.11	938091.00	1001219.88
32	23401.10	24069.41	102855.91	936923.63	938146.55	1001222.92
33	23429.38	24100.19	102863.12	936976.08	938202.05	1001225.96
34	23457.66	24130.97	102870.34	937028.47	938257.48	1001229.01
35	23485.94	24161.76	102877.57	937080.79	938312.85	1001232.06
36	23514.21	24192.55	102884.81	937133.04	938368.16	1001235.12
37	23542.48	24223.34	102892.06	937185.23	938423.40	1001238.17
38	23570.75	24254.14	102899.32	937237.35	938478.58	1001241.24
39	23599.02	24284.94	102906.58	937289.40	938533.70	1001244.30
40	23627.29	24315.75	102913.85	937341.39	938588.76	1001247.37
41	23655.55	24346.56	102921.13	937393.31	938643.76	1001250.45
42	23683.81	24377.37	102928.42	937445.17	938698.69	1001253.52
43	23712.07	24408.19	102935.72	937496.96	938753.56	1001256.61
44	23740.33	24439.01	102943.03	937548.68	938808.37	1001259.69
45	23768.59	24469.84	102950.35	937600.34	938863.12	1001262.78
46	23796.84	24500.67	102957.68	937651.94	938917.81	1001265.87
47	23825.10	24531.51	102965.02	937703.47	938972.44	1001268.97
48	23853.35	24562.35	102972.37	937754.93	939027.00	1001272.07
49	23881.59	24593.20	102979.73	937806.33	939081.51	1001275.18
50	23909.84	24624.05	102987.10	937857.67	939135.95	1001278.29
51	23938.08	24654.91	102994.48	937908.94	939190.34	1001281.40
52	23966.33	24685.77	103001.87	937960.15	939244.66	1001284.51
53	23994.57	24716.63	103009.27	938011.29	939298.93	1001287.64
54	24022.80	24747.50	103016.68	938062.37	939353.13	1001290.76
55	24051.04	24778.37	103024.10	938113.39	939407.27	1001293.89
56	24079.27	24809.25	103031.52	938164.34	939461.36	1001297.02
57	24107.51	24840.13	103038.97	938215.23	939515.38	1001300.16
58	24135.74	24871.02	103046.42	938266.05	939569.35	1001303.30
59	24163.96	24901.91	103053.88	938316.82	939623.26	1001306.44
60	24192.19	24932.80	103061.35	938367.52	939677.11	1001309.59

lib. re	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
7. 61	60 97437.01	433147.59	444541.15	998872.39	1063663.59	1064791.20
7. 53	59 97430.46	432573.47	443981.76	998863.47	1063605.99	1064736.51
1. 45	58 97423.90	432000.79	443423.82	998866.55	1063548.45	1064681.90
5. 37	57 97417.34	431429.55	442867.31	998863.63	1063490.99	1064627.36
2. 30	56 97410.77	430859.74	442312.24	998860.70	1063433.59	1064572.90
1. 24	55 97404.19	430291.36	441758.59	998857.76	1063376.26	1064518.50
1. 18	54 97397.60	429724.40	441206.37	998854.82	1063319.00	1064464.18
1. 12	53 97391.00	429158.85	440655.56	998851.88	1063261.81	1064409.93
1. 06	52 97384.39	428594.72	440106.16	998848.94	1063204.68	1064355.74
1. 01	51 97377.78	428031.99	439558.17	998845.99	1063147.62	1064301.64
1. 97	50 97371.16	427470.66	439011.58	998843.03	1063090.63	1064247.60
1. 92	49 97364.53	426910.72	438466.38	998840.08	1063033.71	1064193.63
1. 88	48 97357.89	426352.18	437922.57	998837.12	1062976.85	1064139.73
1. 85	47 97351.24	425795.01	437380.15	998834.15	1062920.06	1064085.91
1. 82	46 97344.58	425239.23	436839.10	998831.18	1062863.33	1064032.15
1. 79	45 97337.92	424684.82	436299.43	998828.21	1062806.67	1063978.46
4. 77	44 97331.25	424131.77	435761.13	998825.23	1062750.05	1063924.85
7. 75	43 97324.57	423580.09	435224.19	998822.25	1062693.38	1063871.30
0. 73	42 97317.88	423029.77	434688.61	998819.27	1062637.09	1063817.83
3. 71	41 97311.18	422480.80	434154.38	998816.28	1062580.78	1063764.42
0. 71	40 97304.49	421933.18	433621.50	998813.29	1062524.37	1063711.08
0. 71	39 97297.77	421386.90	433089.96	998810.29	1062468.10	1063657.81
2. 71	38 97291.05	420841.96	432559.77	998807.29	1062411.90	1063604.61
5. 71	37 97284.32	420298.35	432030.90	998804.29	1062355.77	1063551.48
8. 72	36 97277.58	419756.06	431503.36	998801.28	1062299.70	1063498.42
1. 72	35 97270.84	419215.10	430977.15	998798.27	1062243.69	1063445.42
4. 75	34 97264.09	418675.46	430452.25	998795.25	1062187.75	1063392.50
7. 77	33 97257.33	418137.13	429928.67	998792.23	1062131.87	1063339.64
0. 79	32 97250.56	417600.11	429406.40	998789.21	1062076.06	1063286.85
3. 82	31 97243.78	417064.40	428885.43	998786.18	1062020.31	1063234.13
6. 85	30 97236.99	416529.98	428365.76	998783.15	1061964.63	1063181.47
9. 88	29 97230.19	415996.85	427847.38	998780.12	1061909.00	1063128.89
2. 92	28 97223.39	415465.01	427330.29	998777.08	1061853.45	1063076.37
5. 96	27 97216.58	414934.46	426814.49	998774.04	1061797.95	1063023.92
9. 01	26 97209.76	414405.19	426299.96	998770.99	1061742.52	1062971.53
2. 06	25 97202.95	413877.19	425786.71	998767.94	1061687.15	1062919.21
5. 12	24 97196.09	413350.46	425274.74	998764.88	1061631.84	1062866.96
8. 17	23 97189.25	412824.99	424764.02	998761.83	1061576.60	1062814.77
1. 24	22 97182.40	412300.79	424254.57	998758.76	1061521.42	1062762.65
4. 30	21 97175.54	411777.84	423746.37	998755.70	1061466.30	1062710.60
7. 37	20 97168.67	411256.14	423239.43	998752.63	1061411.24	1062658.61
10. 45	19 97161.79	410735.69	422733.73	998749.55	1061356.24	1062606.69
3. 52	18 97154.91	410216.49	422229.28	998746.48	1061301.31	1062554.83
6. 61	17 97148.02	409698.52	421726.06	998743.39	1061246.44	1062503.04
9. 69	16 97141.12	409181.78	421224.08	998740.31	1061191.63	1062451.32
2. 78	15 97134.21	408666.27	420723.33	998737.22	1061136.88	1062399.66
5. 87	14 97127.29	408151.99	420223.80	998734.13	1061082.19	1062348.06
8. 97	13 97120.36	407638.92	419724.49	998731.03	1061027.56	1062296.53
7. 07	12 97113.43	407127.07	419224.40	998727.93	1060973.00	1062245.07
7. 18	11 97106.46	406616.43	418723.52	998724.82	1060918.49	1062193.67
7. 29	10 97099.54	406107.00	418223.85	998721.71	1060864.05	1062142.33
8. 40	9 97092.58	405598.77	417724.38	998718.60	1060809.66	1062091.06
8. 51	8 97085.61	405091.74	417225.10	998715.49	1060755.34	1062039.85
8. 64	7 97078.63	404585.90	416726.02	998712.36	1060701.07	1061988.71
9. 76	6 97071.65	404081.25	416227.14	998709.24	1060646.87	1061937.63
9. 89	5 97064.66	403577.79	415728.43	998706.11	1060592.73	1061886.61
9. 02	4 97057.66	403075.50	415229.91	998702.98	1060538.64	1061835.66
10. 10	3 97050.65	402574.40	414808.56	998699.84	1060484.62	1061784.77
10. 30	2 97043.63	402074.46	414323.39	998696.70	1060430.65	1061733.95
10. 44	1 97036.60	401575.70	413839.39	998693.56	1060376.74	1061683.18
10. 59	0 97029.57	401078.09	413356.55	998690.41	1060322.89	1061632.48

14	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	24162.19	24932.80	103061.35	938367.52	939677.11	1001309.59
1	24220.41	24963.70	103068.83	938418.15	939730.89	1001312.74
2	24248.63	24994.60	103076.32	938468.73	939784.63	1001315.90
3	24276.85	25025.51	103083.82	938519.24	939838.30	1001319.06
4	24305.07	25056.42	103091.33	938569.69	939891.91	1001322.22
5	24333.29	25087.34	103098.85	938620.08	939945.47	1001325.39
6	24361.50	25118.26	103106.38	938670.40	939998.96	1001328.56
7	24389.71	25149.19	103113.92	938720.67	940052.40	1001331.73
8	24417.92	25180.12	103121.47	938770.87	940105.78	1001334.91
9	24446.13	25211.06	103129.03	938821.01	940159.10	1001338.09
10	24474.33	25242.00	103136.60	938871.09	940212.37	1001341.38
11	24502.54	25272.94	103144.18	938921.11	940265.58	1001344.47
12	24530.74	25303.89	103151.77	938971.06	940318.73	1001347.67
13	24558.94	25334.84	103159.36	939020.96	940371.84	1001350.87
14	24587.13	25365.80	103166.97	939070.79	940424.86	1001354.07
15	24615.33	25396.70	103174.59	939120.57	940477.84	1001357.27
16	24643.52	25427.73	103182.22	939170.28	940530.76	1001360.48
17	24671.71	25458.70	103189.85	939219.93	940583.63	1001363.70
18	24699.90	25489.68	103197.50	939269.52	940636.44	1001366.92
19	24728.09	25520.66	103205.16	939319.05	940689.19	1001370.14
20	24756.27	25551.65	103212.82	939368.52	940741.89	1001373.37
21	24784.45	25582.64	103220.50	939417.94	940794.53	1001376.60
22	24812.63	25613.63	103228.18	939467.29	940847.12	1001379.83
23	24840.81	25644.63	103235.88	939516.58	940899.55	1001383.07
24	24868.99	25675.63	103243.59	939565.81	940952.12	1001386.31
25	24897.16	25706.64	103251.30	939614.99	941004.54	1001389.55
26	24925.33	25737.66	103259.03	939664.10	941056.90	1001392.80
27	24953.50	25768.68	103266.76	939713.15	941109.21	1001396.06
28	24981.67	25799.70	103274.51	939762.15	941161.46	1001399.31
29	25009.84	25830.73	103282.27	939811.09	941213.66	1001402.58
30	25038.00	25861.76	103290.03	939859.96	941265.81	1001405.84
31	25066.16	25892.80	103297.81	939908.78	941317.89	1001409.11
32	25094.32	25923.84	103305.59	939957.54	941369.93	1001412.38
33	25122.48	25954.88	103313.39	940006.25	941421.91	1001415.66
34	25150.63	25985.93	103321.19	940054.89	941473.83	1001418.94
35	25178.79	26016.90	103329.01	940103.48	941525.70	1001422.23
36	25206.94	26048.05	103336.83	940152.01	941577.52	1001425.51
37	25235.08	26079.11	103344.67	940200.48	941629.28	1001428.81
38	25263.23	26110.18	103352.51	940248.89	941680.99	1001432.10
39	25291.37	26141.26	103360.37	940297.24	941732.05	1001435.40
40	25319.52	26172.34	103368.23	940345.54	941784.25	1001438.71
41	25347.66	26203.42	103376.11	940393.78	941835.80	1001442.02
42	25375.79	26234.51	103383.99	940441.96	941887.29	1001445.33
43	25403.93	26265.60	103391.88	940490.09	941938.74	1001448.65
44	25432.06	26296.70	103399.79	940538.16	941990.13	1001451.97
45	25460.19	26327.80	103407.70	940586.17	942041.46	1001455.20
46	25488.32	26358.91	103415.63	940634.13	942092.75	1001458.62
47	25516.45	26390.02	103423.56	940682.03	942143.98	1001461.95
48	25544.58	26421.14	103431.51	940729.87	942195.15	1001465.29
49	25572.70	26452.26	103439.46	940777.66	942246.28	1001468.62
50	25600.82	26483.39	103447.43	940825.39	942297.35	1001471.97
51	25628.94	26514.52	103455.40	940873.06	942348.38	1001475.32
52	25657.05	26545.66	103463.38	940920.68	942399.35	1001478.67
53	25685.17	26576.80	103471.38	940968.24	942450.26	1001482.02
54	25713.28	26607.94	103479.38	941015.75	942501.13	1001485.38
55	25741.39	26639.09	103487.40	941063.20	942551.94	1001488.75
56	25769.50	26670.25	103495.42	941110.59	942602.71	1001492.11
57	25797.60	26701.41	103503.46	941157.93	942653.42	1001495.48
58	25825.70	26732.57	103511.50	941205.22	942704.08	1001498.86
59	25853.81	26763.74	103519.55	941252.45	942754.69	1001502.24
60	25881.90	26794.92	103527.62	941299.62	942805.25	1001505.62

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
60	97029.57	401078.09	413356.55	998690.41	1060322.89	1061632.48
59	97022.53	400581.65	412874.87	998687.26	1060269.11	1061581.85
58	97015.48	400086.36	412394.35	998684.10	1060215.37	1061531.27
57	97008.42	399592.23	411914.08	998680.94	1060161.70	1061480.79
56	97001.35	399099.24	411436.75	998677.78	1060108.09	1061430.31
55	96994.28	398607.30	410959.67	998674.61	1060054.53	1061379.92
54	96987.20	398116.60	410483.74	998671.44	1060001.04	1061329.60
53	96980.11	397627.12	410008.93	998668.27	1059947.60	1061279.33
52	96973.01	397138.68	409535.26	998665.09	1059894.22	1061229.13
51	96965.90	396651.37	409062.72	998661.91	1059840.90	1061178.99
50	96958.79	396165.18	408591.30	998658.72	1059787.63	1061128.91
49	96951.67	395680.11	408121.00	998655.53	1059734.42	1061078.89
48	96944.54	395196.15	407651.81	998652.33	1059681.27	1061028.94
47	96937.40	394713.31	407183.74	998649.13	1059628.18	1060979.04
46	96930.25	394231.57	406716.77	998645.93	1059575.14	1060929.21
45	96923.09	393750.94	406250.91	998642.73	1059522.16	1060879.43
44	96915.92	393271.41	405786.15	998639.52	1059469.24	1060829.72
43	96908.75	392792.97	405322.49	998636.30	1059416.37	1060780.07
42	96901.57	392315.63	404859.92	998633.08	1059363.56	1060730.48
41	96894.38	391839.37	404398.44	998629.86	1059310.81	1060680.95
40	96887.18	391364.20	403938.04	998626.63	1059258.11	1060631.48
39	96879.98	390890.11	403478.72	998623.40	1059205.47	1060582.06
38	96872.77	390417.10	403020.48	998620.17	1059152.88	1060532.71
37	96865.55	389945.16	402563.32	998616.93	1059100.35	1060483.42
36	96858.32	389474.29	402107.22	998613.69	1059047.88	1060434.19
35	96851.08	389004.48	401652.19	998610.45	1058995.46	1060385.01
34	96843.83	388535.74	401198.23	998607.20	1058943.10	1060335.90
33	96836.57	388068.05	400745.32	998603.94	1058890.79	1060286.85
32	96829.31	387601.42	400293.47	998600.69	1058838.54	1060237.85
31	96822.04	387135.84	399842.67	998597.42	1058786.34	1060188.91
30	96814.76	386671.31	399392.92	998594.16	1058734.19	1060140.04
29	96807.47	386207.82	398944.21	998590.89	1058682.11	1060091.23
28	96800.18	385745.37	398496.54	998587.62	1058630.07	1060042.46
27	96792.88	385283.96	398049.91	998584.34	1058578.09	1059993.75
26	96785.57	384823.58	397604.31	998581.06	1058526.17	1059945.11
25	96778.25	384364.24	397159.75	998577.77	1058474.30	1059896.52
24	96770.92	383905.91	396716.21	998574.49	1058422.48	1059847.99
23	96763.58	383448.61	396273.69	998571.19	1058370.72	1059799.52
22	96756.23	382992.33	395832.19	998567.90	1058319.01	1059751.11
21	96748.88	382537.07	395391.71	998564.60	1058267.35	1059702.76
20	96741.52	382082.81	394952.24	998561.29	1058215.75	1059654.46
19	96734.15	381629.57	394513.79	998557.98	1058164.20	1059606.21
18	96726.77	381177.33	394076.33	998554.67	1058112.71	1059558.04
17	96719.38	380726.09	393639.88	998551.35	1058061.26	1059509.91
16	96711.99	380275.85	393204.43	998548.03	1058009.87	1059461.84
15	96704.59	379826.61	392769.97	998544.71	1057958.54	1059413.83
14	96697.18	379378.35	392336.51	998541.38	1057907.25	1059365.87
13	96689.76	378931.09	391904.03	998538.05	1057856.02	1059317.97
12	96682.33	378484.81	391472.54	998534.71	1057804.85	1059270.13
11	96674.90	378039.51	391042.03	998531.38	1057753.72	1059222.34
10	96667.46	377595.19	390612.50	998528.03	1057702.65	1059174.61
9	96660.01	377151.85	390183.95	998524.68	1057651.62	1059126.94
8	96652.55	376709.47	389756.37	998521.33	1057600.65	1059079.32
7	96645.08	376268.07	389329.76	998517.98	1057549.74	1059031.76
6	96637.60	375827.63	388904.11	998514.62	1057498.87	1058984.25
5	96630.12	375388.15	388479.43	998511.25	1057448.06	1058936.80
4	96622.63	374949.63	388055.70	998507.89	1057397.20	1058889.41
3	96615.13	374512.07	387632.93	998504.52	1057346.58	1058842.07
2	96607.62	374075.46	387211.12	998501.14	1057295.91	1058794.78
1	96600.10	373639.80	386790.25	998497.76	1057245.31	1058747.55
0	96592.58	373205.08	386370.33	998494.38	1057194.75	1058700.38

15	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	25881.90	26794.92	103527.62	941299.62	942805.25	1001505.61
1	25910.00	26826.10	103535.69	941346.74	942855.75	1001509.01
2	25938.10	26857.28	103543.78	941393.81	942906.21	1001512.40
3	25966.19	26888.47	103551.87	941440.82	942956.61	1001515.80
4	25994.28	26919.67	103559.98	941487.78	943006.97	1001519.19
5	26022.37	26950.87	103568.09	941534.68	943057.27	1001522.60
6	26050.45	26982.07	103576.21	941581.52	943107.53	1001526.00
7	26078.53	27013.28	103584.35	941628.32	943157.73	1001529.41
8	26106.61	27044.49	103592.49	941675.06	943207.89	1001532.83
9	26134.69	27075.71	103600.65	941721.74	943257.99	1001536.25
10	26162.77	27106.93	103608.81	941768.37	943308.04	1001539.67
11	26190.85	27138.16	103616.99	941814.95	943358.05	1001543.10
12	26218.92	27169.40	103625.17	941861.48	943408.00	1001546.53
13	26246.99	27200.64	103633.37	941907.95	943457.91	1001549.96
14	26275.06	27231.88	103641.57	941954.36	943507.76	1001553.40
15	26303.12	27263.13	103649.79	942000.73	943557.57	1001556.84
16	26331.18	27294.38	103658.01	942047.04	943607.33	1001560.29
17	26359.24	27325.64	103666.25	942093.30	943657.04	1001563.74
18	26387.30	27356.90	103674.49	942139.50	943706.70	1001567.19
19	26415.36	27388.17	103682.75	942185.66	943756.31	1001570.65
20	26443.42	27419.44	103691.01	942231.76	943805.87	1001574.11
21	26471.47	27450.72	103699.29	942277.80	943855.38	1001577.58
22	26499.52	27482.01	103707.57	942323.80	943904.85	1001581.05
23	26527.57	27513.30	103715.87	942369.74	943954.26	1001584.52
24	26555.61	27544.50	103724.17	942415.65	944003.63	1001588.00
25	26583.65	27575.89	103732.49	942461.47	944052.95	1001591.48
26	26611.69	27607.19	103740.82	942507.26	944102.22	1001594.97
27	26639.73	27638.50	103749.15	942553.09	944151.45	1001598.46
28	26667.77	27669.81	103757.50	942598.67	944200.62	1001601.95
29	26695.81	27701.13	103765.85	942644.30	944249.75	1001605.45
30	26723.84	27732.45	103774.21	942689.88	944298.83	1001608.95
31	26751.87	27763.78	103782.60	942735.41	944347.86	1001612.45
32	26779.89	27795.12	103790.98	942780.80	944396.85	1001615.96
33	26807.92	27826.46	103799.38	942826.31	944445.79	1001619.48
34	26835.94	27857.80	103807.79	942871.69	944494.68	1001622.99
35	26863.96	27889.15	103816.21	942917.01	944543.52	1001626.52
36	26891.98	27920.50	103824.63	942962.28	944592.32	1001630.04
37	26920.00	27951.86	103833.07	943007.50	944641.07	1001633.57
38	26948.01	27983.23	103841.52	943052.67	944689.78	1001637.10
39	26976.02	28014.59	103849.98	943097.79	944738.43	1001640.64
40	27004.03	28045.97	103858.44	943142.86	944787.04	1001644.18
41	27032.04	28077.35	103866.92	943187.88	944835.61	1001647.73
42	27060.04	28108.73	103875.41	943232.85	944884.13	1001651.28
43	27088.05	28140.12	103883.91	943277.77	944932.60	1001654.83
44	27116.05	28171.52	103892.42	943322.64	944981.02	1001658.39
45	27144.04	28202.92	103900.94	943367.46	945029.40	1001661.95
46	27172.04	28234.31	103909.47	943412.23	945077.74	1001665.51
47	27200.03	28265.73	103918.00	943456.94	945126.02	1001669.08
48	27228.02	28297.15	103926.55	943501.61	945174.27	1001672.65
49	27256.01	28328.57	103935.11	943546.23	945222.46	1001676.23
50	27284.00	28359.99	103943.68	943590.80	945270.61	1001679.81
51	27311.98	28391.42	103952.26	943635.32	945318.72	1001683.39
52	27339.96	28422.86	103960.85	943679.80	945366.78	1001686.98
53	27367.94	28454.30	103969.45	943724.22	945414.79	1001690.58
54	27395.92	28485.75	103978.06	943768.59	945462.76	1001694.17
55	27423.90	28517.20	103986.69	943812.92	945510.60	1001697.77
56	27451.87	28548.66	103995.32	943857.10	945558.57	1001701.38
57	27479.84	28580.12	104003.96	943901.42	945606.41	1001704.99
58	27507.81	28611.59	104012.61	943945.60	945654.20	1001708.60
59	27535.78	28643.06	104021.27	943989.73	945701.94	1001712.22
60	27563.74	28674.54	104029.94	944033.81	945749.64	1001715.84

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologariſch. pro Tangente	Tomologariſch. pro Secante
60	96592.58	373205.08	386370.33	998494.38	1057194.75	1058700.38
59	96585.05	372771.31	385951.35	998490.99	1057144.25	1058653.26
58	96577.51	372338.47	385533.32	998487.60	1057093.79	1058606.10
57	96569.96	371906.58	385116.22	998484.20	1057043.39	1058559.18
56	96562.40	371475.61	384700.05	998480.81	1056993.03	1058512.22
55	96554.83	371045.58	384284.82	998477.40	1056942.73	1058465.32
54	96547.26	370616.48	383870.51	998474.00	1056892.47	1058418.48
53	96539.68	370188.30	383457.13	998470.59	1056842.27	1058371.68
52	96532.09	369761.03	383044.67	998467.17	1056792.11	1058324.94
51	96524.49	369334.69	382633.13	998463.75	1056742.01	1058278.26
50	96516.88	368909.27	382222.51	998460.33	1056691.96	1058231.63
49	96509.27	368484.75	381812.80	998456.90	1056641.95	1058185.05
48	96501.65	368061.15	381403.99	998453.47	1056592.09	1058138.52
47	96494.02	367638.45	380996.10	998450.04	1056542.09	1058092.05
46	96486.38	367216.65	380589.11	998446.60	1056492.24	1058045.64
45	96478.73	366795.75	380183.01	998443.16	1056442.43	1057999.27
44	96471.07	366375.75	379777.82	998439.71	1056392.67	1057952.96
43	96463.41	365956.65	379373.52	998436.26	1056342.96	1057906.70
42	96455.74	365538.44	378970.11	998432.81	1056293.30	1057860.50
41	96448.06	365121.11	378567.60	998429.35	1056243.69	1057814.34
40	96440.37	364704.67	378165.96	998425.89	1056194.13	1057768.24
39	96432.67	364289.11	377765.22	998422.42	1056144.62	1057722.20
38	96424.97	363874.44	377365.35	998418.95	1056095.15	1057676.20
37	96417.26	363460.64	376966.36	998415.48	1056045.74	1057630.26
36	96409.54	363047.71	376568.24	998412.00	1055996.37	1057584.37
35	96401.81	362635.66	376171.00	998408.52	1055947.05	1057538.53
34	96394.07	362224.47	375774.62	998405.03	1055897.78	1057492.74
33	96386.33	361814.15	375379.11	998401.54	1055848.55	1057447.01
32	96378.58	361404.69	374984.47	998398.05	1055799.38	1057401.33
31	96370.82	360996.09	374590.68	998394.55	1055750.25	1057355.70
30	96363.05	360588.35	374197.75	998391.05	1055701.17	1057310.12
29	96355.27	360181.46	373805.68	998387.55	1055652.14	1057264.59
28	96347.48	359775.43	373414.46	998384.04	1055603.15	1057219.11
27	96339.69	359370.24	373024.09	998380.52	1055554.21	1057173.69
26	96331.87	358965.90	372634.57	998377.01	1055505.32	1057128.31
25	96324.08	358562.41	372245.89	998373.48	1055456.48	1057083.00
24	96316.26	358159.75	371858.05	998369.96	1055407.68	1057037.72
23	96308.43	357757.94	371471.05	998366.43	1055358.93	1056992.50
22	96300.59	357356.06	371084.89	998362.90	1055310.22	1056947.33
21	96292.75	356956.81	370699.56	998359.36	1055261.57	1056902.21
20	96284.90	356557.49	370315.06	998355.82	1055212.96	1056857.14
19	96277.04	356159.00	369931.39	998352.27	1055164.39	1056812.12
18	96269.17	355761.33	369548.54	998348.72	1055115.87	1056767.15
17	96261.30	355364.49	369166.52	998345.17	1055067.40	1056722.23
16	96253.42	354968.46	368785.32	998341.62	1055018.98	1056677.36
15	96245.53	354573.25	368404.93	998338.05	1054970.60	1056632.54
14	96237.63	354178.86	368025.36	998334.49	1054922.25	1056587.77
13	96229.72	353785.28	367646.60	998330.92	1054873.98	1056543.06
12	96221.80	353392.51	367268.65	998327.35	1054825.73	1056498.39
11	96213.87	353000.54	366891.51	998323.77	1054777.54	1056453.77
10	96205.94	352609.38	366515.19	998320.19	1054729.37	1056409.20
9	96198.00	352219.02	366139.64	998316.61	1054681.22	1056364.68
8	96190.05	351829.46	365764.91	998313.02	1054633.22	1056320.20
7	96182.09	351440.70	365390.97	998309.42	1054585.21	1056275.78
6	96174.13	351052.73	365017.83	998305.83	1054537.24	1056231.41
5	96166.16	350665.55	364645.48	998302.23	1054489.31	1056187.08
4	96158.18	350279.16	364273.92	998298.62	1054441.43	1056142.81
3	96150.19	349893.56	363903.15	998295.01	1054393.59	1056098.58
2	96142.19	349508.74	363533.16	998291.40	1054345.80	1056054.40
1	96134.18	349124.70	363163.95	998287.78	1054298.06	1056010.27
0	96126.17	348741.44	362795.53	998284.16	1054250.36	1055966.19

16	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Temologarith. pro Secante
0	27563.74	28674.54	104029.94	944033.81	945749.64	1001715.84
1	27591.70	28706.02	104038.63	944077.84	945797.30	1001719.46
2	27619.65	28737.51	104047.32	944121.82	945844.91	1001723.09
3	27647.61	28769.00	104056.02	944165.76	945892.48	1001726.72
4	27675.56	28800.50	104064.73	944209.65	945940.01	1001730.36
5	27703.52	28832.01	104073.46	944253.49	945987.49	1001734.00
6	27731.47	28863.52	104082.19	944297.28	946034.92	1001737.63
7	27759.41	28895.03	104090.94	944341.03	946082.32	1001741.29
8	27787.36	28926.55	104099.69	944384.72	946129.67	1001744.94
9	27815.30	28958.08	104108.45	944428.37	946176.97	1001748.60
10	27843.24	28989.61	104117.23	944471.97	946224.23	1001752.26
11	27871.18	29021.14	104126.01	944515.53	946271.45	1001755.92
12	27899.11	29052.68	104134.81	944559.04	946318.63	1001759.59
13	27927.04	29084.23	104143.62	944602.50	946365.76	1001763.26
14	27954.97	29115.78	104152.43	944645.91	946412.85	1001766.94
15	27982.90	29147.34	104161.26	944689.27	946459.90	1001770.62
16	28010.83	29178.90	104170.09	944732.59	946506.90	1001774.31
17	28038.75	29210.47	104178.94	944775.86	946553.86	1001777.99
18	28066.67	29242.05	104187.80	944819.09	946600.78	1001781.66
19	28094.59	29273.63	104196.67	944862.27	946647.65	1001785.33
20	28122.51	29305.21	104205.54	944905.40	946694.48	1001789.08
21	28150.42	29336.80	104214.43	944948.49	946741.27	1001792.79
22	28178.33	29368.39	104223.33	944991.53	946788.02	1001796.49
23	28206.24	29399.99	104232.24	945034.52	946834.73	1001800.21
24	28234.15	29431.60	104241.16	945077.47	946881.39	1001803.92
25	28262.05	29463.21	104250.09	945120.37	946928.01	1001807.64
26	28289.95	29494.83	104259.03	945163.22	946974.59	1001811.37
27	28317.85	29526.45	104267.98	945206.03	947021.12	1001815.10
28	28345.75	29558.08	104276.94	945248.79	947067.62	1001818.83
29	28373.64	29589.71	104285.91	945291.51	947114.07	1001822.56
30	28401.53	29621.35	104294.89	945334.18	947160.48	1001826.30
31	28429.42	29652.99	104303.88	945376.81	947206.85	1001830.05
32	28457.31	29684.64	104312.89	945419.39	947253.18	1001833.80
33	28485.20	29716.30	104321.90	945461.92	947299.47	1001837.55
34	28513.08	29747.96	104330.92	945504.41	947345.72	1001841.30
35	28540.96	29779.62	104339.95	945546.86	947391.92	1001845.06
36	28568.84	29811.29	104349.00	945589.26	947438.08	1001848.83
37	28596.71	29842.97	104358.05	945631.61	947484.21	1001852.60
38	28624.58	29874.65	104367.12	945673.92	947530.29	1001856.37
39	28652.44	29906.34	104376.19	945716.18	947576.33	1001860.14
40	28680.32	29938.03	104385.28	945758.40	947622.33	1001863.92
41	28708.19	29969.73	104394.37	945800.58	947668.29	1001867.71
42	28736.05	30001.44	104403.48	945842.71	947714.21	1001871.50
43	28763.91	30033.15	104412.59	945884.80	947760.09	1001875.29
44	28791.77	30064.86	104421.72	945926.84	947805.92	1001879.09
45	28819.63	30096.48	104430.86	945968.84	947851.72	1001882.89
46	28847.48	30128.31	104440.01	946010.79	947897.48	1001886.69
47	28875.33	30160.04	104449.17	946052.70	947943.19	1001890.50
48	28903.18	30191.78	104458.33	946094.56	947988.87	1001894.31
49	28931.03	30223.52	104467.51	946136.38	948034.51	1001898.13
50	28958.87	30255.27	104476.70	946178.16	948080.11	1001901.95
51	28986.71	30287.03	104485.90	946219.89	948125.66	1001905.77
52	29014.55	30318.79	104495.11	946261.58	948171.18	1001909.60
53	29042.39	30350.55	104504.33	946303.23	948216.66	1001913.43
54	29070.22	30382.32	104513.57	946344.83	948262.10	1001917.27
55	29098.05	30414.10	104522.81	946386.39	948307.50	1001921.11
56	29125.88	30445.88	104532.06	946427.90	948352.86	1001924.96
57	29153.71	30477.67	104541.32	946469.38	948398.18	1001928.80
58	29181.53	30509.46	104550.60	946510.81	948443.46	1001932.65
59	29209.35	30541.26	104559.88	946552.19	948488.70	1001936.51
60	29237.17	30573.07	104569.18	946593.53	948533.90	1001940.37

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologarith. pro Tangente	Tomologarith. pro Secante
84	60	96126.17	348741.44	362795.53	998284.16	1054250.36
46	59	96118.15	348358.96	362427.88	998280.54	1054202.70
09	58	96110.12	347977.26	362061.01	998276.01	1054155.09
71	57	96102.08	347596.32	361694.90	998272.28	1054107.52
36	56	96094.03	347216.16	361329.57	998269.64	1054059.90
00	55	96085.98	346836.76	360965.01	998266.00	1054012.51
63	54	96077.92	346458.43	360601.21	998262.36	1053965.08
29	53	96069.85	346080.26	360238.18	998258.71	1053917.68
94	52	96061.77	345703.15	359875.90	998255.06	1053870.33
60	51	96053.68	345326.79	359514.39	998251.40	1053823.03
26	50	96045.58	344951.20	359153.63	998247.74	1053775.77
92	49	96037.48	344576.35	358793.62	998244.08	1053728.55
59	48	96029.37	344202.26	358434.37	998240.41	1053681.37
10	47	96021.25	343828.91	358075.86	998236.74	1053634.24
24	46	96013.12	343456.31	357718.10	998233.06	1053587.15
52	45	96004.98	343084.46	357361.08	998229.38	1053540.10
11	44	95996.84	342713.34	357004.81	998225.69	1053493.10
29	43	95988.69	342342.97	356649.28	998222.01	1053446.14
10	42	95980.53	341973.33	356294.48	998218.31	1053399.22
18	41	95972.36	341604.43	355940.42	998214.61	1053352.35
38	40	95964.18	341236.26	355587.10	998210.92	1053305.52
10	39	95956.00	340868.82	355234.50	998207.21	1053258.73
9	38	95947.81	340502.10	354882.62	998203.51	1053211.98
1	37	95939.61	340136.12	354531.49	998199.79	1053165.27
2	36	95931.44	339770.85	354181.07	998196.08	1053118.61
4	35	95923.15	339406.31	353831.39	998192.36	1053071.99
7	34	95914.95	339042.40	353482.40	998188.63	1053025.41
0	33	95906.72	338679.38	353134.14	998184.90	1052978.88
3	32	95898.48	338316.99	352786.66	998181.17	1052932.36
6	31	95890.23	337955.31	352439.77	998177.44	1052885.93
1	30	95881.97	337594.34	352093.69	998173.70	1052839.52
3	29	95873.70	337234.08	351748.24	998169.95	1052793.15
5	28	95865.42	336874.55	351403.54	998166.20	1052746.82
8	27	95857.15	336515.68	351059.54	998162.45	1052700.53
1	26	95848.86	336157.53	350716.25	998158.70	1052654.28
3	25	95840.57	335800.08	350373.66	998154.94	1052608.08
6	24	95832.23	335443.33	350031.75	998151.17	1052561.92
9	23	95823.94	335087.28	349690.55	998147.40	1052515.79
1	22	95815.62	334731.91	349350.04	998143.63	1052469.71
3	21	95807.29	334377.24	349010.23	998139.86	1052423.67
6	20	95798.95	334023.26	348671.10	998136.08	1052377.67
9	19	95790.60	333669.97	348332.67	998132.29	1052331.71
1	18	95782.25	333317.36	347994.92	998128.50	1052285.79
3	17	95773.89	332965.43	347657.85	998124.71	1052239.91
6	16	95765.52	332614.19	347321.46	998120.91	1052194.08
9	15	95757.14	332263.62	346985.76	998117.11	1052148.28
1	14	95748.75	331913.73	346650.73	998113.31	1052102.50
3	13	95740.35	331564.52	346316.37	998109.50	1052056.81
6	12	95731.95	331215.98	345982.60	998105.69	1052011.13
9	11	95723.54	330868.11	345649.69	998101.87	1051965.49
1	10	95715.12	330520.91	345317.55	998098.05	1051919.89
3	9	95706.69	330174.38	344985.68	998094.23	1051874.34
6	8	95698.25	329828.51	344654.67	998090.40	1051828.82
9	7	95689.81	329483.30	344324.33	998086.57	1051783.34
1	6	95681.36	329138.76	343994.65	998082.73	1051737.90
3	5	95672.90	328794.87	343665.63	998078.89	1051692.50
6	4	95664.43	328451.64	343337.27	998075.05	1051647.14
9	3	95655.95	328109.07	343009.56	998071.20	1051601.82
1	2	95647.47	327767.15	342682.51	998067.35	1051556.54
3	1	95638.98	327425.88	342356.11	998063.49	1051511.30
6	0	95630.48	327085.26	342030.36	998059.63	1051466.10

17	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	29237.17	30573.07	104569.18	946593.53	948533.90	1001940.37
1	29264.99	30604.88	104578.48	946634.83	948579.07	1001944.23
2	29292.80	30636.69	104587.80	946676.09	948624.19	1001948.10
3	29320.61	30668.51	104597.12	946717.30	948669.28	1001951.97
4	29348.42	30700.34	104606.46	946758.48	948714.33	1001955.85
5	29376.23	30732.18	104615.81	946799.60	948759.33	1001959.73
6	29404.03	30764.02	104625.16	946840.69	948804.30	1001963.61
7	29431.83	30795.86	104634.53	946881.73	948849.24	1001967.50
8	29459.63	30827.71	104643.91	946922.73	948894.13	1001971.40
9	29487.43	30859.57	104653.30	946963.69	948938.98	1001975.29
10	29515.22	30891.43	104662.70	947004.61	948983.80	1001979.19
11	29543.01	30923.30	104672.11	947045.48	949028.58	1001983.10
12	29570.80	30955.17	104681.53	947086.31	949073.32	1001987.01
13	29598.59	30987.05	104690.96	947127.10	949118.02	1001990.92
14	29626.38	31018.93	104700.40	947167.85	949162.69	1001994.84
15	29654.16	31050.82	104709.86	947208.56	949207.31	1001998.76
16	29681.94	31082.72	104719.32	947249.22	949251.90	1002002.68
17	29709.71	31114.62	104728.79	947289.85	949296.46	1002006.61
18	29737.49	31146.53	104738.28	947330.43	949340.97	1002010.54
19	29765.26	31178.44	104747.77	947370.97	949385.45	1002014.48
20	29793.03	31210.36	104757.28	947411.46	949429.88	1002018.42
21	29820.79	31242.29	104766.79	947451.92	949474.29	1002022.36
22	29848.56	31274.22	104776.32	947492.34	949518.65	1002026.31
23	29876.32	31306.16	104785.86	947532.71	949562.98	1002030.27
24	29904.08	31338.10	104795.40	947573.04	949607.27	1002034.22
25	29931.84	31370.05	104804.96	947613.34	949651.52	1002038.18
26	29959.59	31402.00	104814.53	947653.59	949695.74	1002042.15
27	29987.34	31433.96	104824.11	947693.80	949739.91	1002046.12
28	30015.09	31465.93	104833.70	947733.96	949784.06	1002050.09
29	30042.84	31497.90	104843.30	947774.09	949828.16	1002054.07
30	30070.58	31529.88	104852.91	947814.18	949872.23	1002058.05
31	30098.32	31561.86	104862.53	947854.23	949916.26	1002062.04
32	30126.06	31593.85	104872.17	947894.23	949960.26	1002066.02
33	30153.80	31625.85	104881.81	947934.20	950004.22	1002070.02
34	30181.53	31657.85	104891.46	947974.12	950048.14	1002074.02
35	30209.26	31689.86	104901.13	948014.01	950092.03	1002078.01
36	30236.99	31721.87	104910.80	948053.85	950135.88	1002082.02
37	30264.71	31753.89	104920.49	948093.66	950179.69	1002086.03
38	30292.44	31785.91	104930.19	948133.42	950223.47	1002090.04
39	30320.16	31817.94	104939.89	948173.15	950267.21	1002094.06
40	30347.88	31849.98	104949.61	948212.83	950310.92	1002098.08
41	30375.59	31882.02	104959.34	948252.48	950354.59	1002102.11
42	30403.31	31914.07	104969.08	948292.08	950398.22	1002106.14
43	30431.02	31946.13	104978.83	948331.65	950441.82	1002110.17
44	30458.72	31978.19	104988.59	948371.17	950485.38	1002114.21
45	30486.43	32010.25	104998.36	948410.66	950528.91	1002118.25
46	30514.13	32042.32	105008.15	948450.10	950572.40	1002122.30
47	30541.83	32074.40	105017.94	948489.51	950615.86	1002126.35
48	30569.53	32106.49	105027.74	948528.88	950659.28	1002130.40
49	30597.23	32138.58	105037.56	948568.20	950702.67	1002134.46
50	30624.92	32170.67	105047.38	948607.49	950746.02	1002138.52
51	30652.61	32202.77	105057.22	948646.74	950789.33	1002142.59
52	30680.29	32234.88	105067.06	948685.95	950832.61	1002146.66
53	30707.98	32266.90	105076.92	948725.12	950875.86	1002150.73
54	30735.66	32299.12	105086.79	948764.26	950919.07	1002154.81
55	30763.34	32331.25	105096.67	948803.35	950962.24	1002158.89
56	30791.02	32363.38	105106.56	948842.40	951005.39	1002162.98
57	30818.69	32395.52	105116.46	948881.42	951048.49	1002167.07
58	30846.36	32427.66	105126.37	948920.40	951091.56	1002171.17
59	30874.03	32459.81	105136.29	948959.34	951134.60	1002175.26
60	30901.70	32491.97	105146.22	948998.24	951177.60	1002179.37

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
37	95630.43	327085.26	342030.36	998059.63	1051466.10	1053406.47
23	95621.97	326745.29	341705.26	998055.77	1051420.93	1053395.17
10	95613.45	326405.96	341380.80	998051.90	1051375.81	1053323.91
97	95604.92	326067.28	341056.99	998048.03	1051330.72	1053282.70
85	95596.39	325729.24	340733.82	998044.15	1051285.67	1053241.52
73	95587.85	325391.84	340411.30	998040.27	1051240.67	1053200.40
61	95579.30	325055.08	340089.41	998036.39	1051195.70	1053159.31
50	95570.74	324718.95	339768.16	998032.50	1051150.76	1053118.27
40	95562.17	324383.46	339447.54	998028.60	1051105.87	1053077.27
29	95553.60	324048.60	339127.55	998024.71	1051061.02	1053036.31
19	95545.02	323714.38	338808.20	998020.81	1051016.20	1052995.39
10	95536.43	323380.78	338489.48	998016.90	1050971.42	1052954.52
01	95527.83	323047.80	338171.38	998012.99	1050926.68	1052913.69
92	95519.22	322715.46	337853.91	998009.08	1050881.98	1052872.90
84	95510.61	322383.73	337537.07	998005.16	1050837.31	1052832.15
76	95502.99	322052.63	337220.84	998001.24	1050792.69	1052791.44
68	95495.36	321722.15	336905.24	997997.32	1050748.10	1052750.78
61	95487.72	321392.28	336590.26	997993.39	1050703.54	1052710.15
54	95479.07	321063.04	336275.89	997989.46	1050659.03	1052669.57
48	95470.42	320734.40	335962.14	997985.52	1050614.55	1052629.05
42	95461.76	320406.38	335649.00	997981.58	1050570.12	1052588.54
36	95453.09	320078.97	335336.47	997977.64	1050525.71	1052548.08
31	95444.41	319752.17	335024.55	997973.69	1050481.35	1052507.66
27	95435.72	319425.98	334713.24	997969.73	1050437.02	1052467.29
23	95427.03	319100.39	334402.54	997965.78	1050392.73	1052426.96
18	95418.33	318775.40	334092.44	997961.82	1050348.48	1052386.66
15	95409.62	318451.02	333782.94	997957.85	1050304.26	1052346.41
12	95401.90	318127.24	333474.05	997953.88	1050260.09	1052306.20
09	95393.17	317804.06	333165.75	997949.91	1050215.94	1052266.04
07	95384.43	317481.47	332858.05	997945.93	1050171.84	1052225.91
05	95375.69	317159.48	332550.95	997941.95	1050127.77	1052185.82
04	95366.94	316838.08	332244.44	997937.96	1050083.74	1052145.77
02	95358.18	316517.28	331938.53	997933.98	1050039.74	1052105.77
02	95349.41	316197.06	331633.20	997929.98	1049995.78	1052065.80
02	95340.64	315877.44	331328.47	997925.99	1049951.86	1052025.88
01	95331.86	315558.40	331024.32	997921.98	1049907.97	1051985.99
02	95323.07	315239.94	330720.76	997917.98	1049864.12	1051946.15
03	95314.27	314922.07	330417.78	997913.97	1049820.31	1051906.34
04	95305.46	314604.78	330115.39	997909.96	1049776.53	1051866.58
06	95296.64	314288.07	329813.57	997905.94	1049732.79	1051826.85
08	95287.82	313971.94	329512.34	997901.92	1049689.08	1051787.17
11	95279.99	313656.39	329211.68	997897.89	1049645.41	1051747.52
14	95271.15	313341.41	328911.60	997893.86	1049601.78	1051707.92
17	95262.30	313027.01	328612.09	997889.83	1049558.18	1051668.35
21	95253.44	312713.17	328313.16	997885.79	1049514.62	1051628.83
25	95244.58	312399.91	328014.79	997881.75	1049471.09	1051589.34
30	95235.71	312087.22	327717.00	997877.70	1049427.60	1051549.90
35	95226.83	311775.09	327419.77	997873.65	1049384.14	1051510.49
40	95217.94	311463.53	327123.11	997869.60	1049340.71	1051471.12
46	95209.04	311152.54	326827.02	997865.54	1049297.33	1051431.80
52	95200.14	310842.10	326531.49	997861.48	1049253.98	1051392.51
59	95191.23	310532.23	326236.52	997857.41	1049210.67	1051353.26
66	95182.31	310222.91	325942.11	997853.34	1049167.39	1051314.05
73	95173.38	309914.16	325648.25	997849.27	1049124.14	1051274.88
81	95164.44	309605.96	325354.96	997845.19	1049080.93	1051235.74
89	95155.49	309298.31	325062.22	997841.11	1049037.76	1051196.65
98	95146.54	308991.22	324770.03	997837.02	1048994.61	1051157.60
07	95137.58	308684.68	324478.40	997832.93	1048951.51	1051118.58
17	95128.61	308378.69	324187.32	997828.83	1048908.44	1051079.60
26	95119.63	308073.25	323896.78	997824.74	1048865.40	1051040.66
37	95110.65	307768.35	323606.80	997820.63	1048822.40	1051001.76

18	SINVS.	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	30901.70	32491.97	105146.22	948998.24	951177.60	1002179.37
1	30929.36	32524.13	105156.17	949037.10	951220.57	1002183.47
2	30957.02	32556.30	105166.12	949075.92	951263.51	1002187.59
3	30984.68	32588.48	105176.08	949114.71	951306.41	1002191.70
4	31012.34	32620.66	105186.06	949153.45	951349.27	1002195.82
5	31039.99	32652.85	105196.05	949192.16	951392.10	1002199.94
6	31067.64	32685.04	105206.04	949230.83	951434.90	1002204.07
7	31095.29	32717.24	105216.05	949269.46	951477.66	1002208.20
8	31122.94	32749.44	105226.07	949308.06	951520.39	1002212.34
9	31150.58	32781.65	105236.10	949346.61	951563.09	1002216.47
10	31178.22	32813.87	105246.14	949385.13	951605.75	1002220.62
11	31205.86	32846.10	105256.19	949423.61	951648.38	1002224.77
12	31233.49	32878.33	105266.25	949462.05	951690.97	1002228.91
13	31261.12	32910.56	105276.33	949500.46	951733.53	1002233.07
14	31288.75	32942.80	105286.41	949538.83	951776.06	1002237.23
15	31316.38	32975.05	105296.51	949577.16	951818.55	1002241.40
16	31344.00	33007.31	105306.61	949615.45	951861.01	1002245.56
17	31371.63	33039.57	105316.73	949653.70	951903.44	1002249.74
18	31399.25	33071.84	105326.86	949691.92	951945.83	1002253.91
19	31426.86	33104.11	105336.99	949730.10	951988.19	1002258.09
20	31454.48	33136.39	105347.14	949768.24	952030.52	1002262.28
21	31482.09	33168.68	105357.30	949806.35	952072.82	1002266.46
22	31509.69	33200.97	105367.47	949844.42	952115.08	1002270.66
23	31537.30	33233.27	105377.65	949882.45	952157.30	1002274.85
24	31564.90	33265.57	105387.85	949920.45	952199.50	1002279.05
25	31592.50	33297.88	105398.05	949958.40	952241.66	1002283.26
26	31620.10	33330.20	105408.26	949996.33	952283.79	1002287.47
27	31647.70	33362.52	105418.49	950034.21	952325.89	1002291.68
28	31675.29	33394.85	105428.73	950072.06	952367.95	1002295.90
29	31702.88	33427.19	105438.97	950109.87	952409.99	1002300.12
30	31730.47	33459.53	105449.23	950147.64	952451.99	1002304.34
31	31758.05	33491.88	105459.50	950185.38	952493.95	1002308.57
32	31785.63	33524.24	105469.78	950223.08	952535.89	1002312.80
33	31813.21	33556.60	105480.07	950260.75	952577.79	1002317.04
34	31840.79	33588.97	105490.37	950298.38	952619.66	1002321.28
35	31868.36	33621.34	105500.68	950335.97	952661.50	1002325.53
36	31895.93	33653.72	105511.01	950373.53	952703.31	1002329.78
37	31923.50	33686.11	105521.34	950411.05	952745.08	1002334.03
38	31951.06	33718.50	105531.69	950448.53	952786.82	1002338.29
39	31978.63	33750.90	105542.04	950485.98	952828.53	1002342.55
40	32006.19	33783.30	105552.41	950523.39	952870.21	1002346.82
41	32033.74	33815.73	105562.79	950560.77	952911.86	1002351.09
42	32061.30	33848.13	105573.18	950598.11	952953.47	1002355.36
43	32088.85	33880.56	105583.58	950635.42	952995.05	1002359.64
44	32116.40	33912.99	105593.99	950672.69	953036.61	1002363.92
45	32143.95	33945.43	105604.41	950709.92	953078.13	1002368.21
46	32171.49	33977.87	105614.85	950747.12	953119.61	1002372.50
47	32199.03	34010.32	105625.29	950784.28	953161.07	1002376.79
48	32226.57	34042.78	105635.75	950821.41	953202.50	1002381.09
49	32254.10	34075.24	105646.21	950858.50	953243.89	1002385.39
50	32281.64	34107.71	105656.69	950895.56	953285.26	1002389.70
51	32309.17	34140.19	105667.18	950932.58	953326.59	1002394.01
52	32336.70	34172.67	105677.68	950969.56	953367.89	1002398.33
53	32364.22	34205.16	105688.19	951006.51	953409.16	1002402.64
54	32391.74	34237.65	105698.71	951043.43	953450.40	1002406.97
55	32419.26	34270.15	105709.24	951080.31	953491.61	1002411.30
56	32446.78	34302.66	105719.78	951117.16	953532.78	1002415.62
57	32474.29	34335.18	105730.34	951153.97	953573.93	1002419.96
58	32501.80	34367.70	105740.90	951190.74	953615.05	1002424.30
59	32529.31	34400.23	105751.48	951227.49	953656.13	1002428.65
60	32556.82	34432.76	105762.07	951264.19	953697.19	1002432.99

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologarith. pro Tangente	Tomologarith. pro Secante
37	95105.65	307768.35	323606.80	997820.63	1048822.40	1051001.76
47	95096.66	307464.00	323317.36	997816.53	1048779.43	1050962.90
59	95087.66	307160.20	323028.46	997812.41	1048736.40	1050924.08
70	95078.67	306856.93	322740.11	997808.30	1048693.59	1050885.29
82	95069.63	306554.21	322452.30	997804.18	1048650.73	1050846.55
94	95060.60	306252.03	322165.03	997800.06	1048607.90	1050807.84
07	95051.57	305950.38	321878.30	997795.93	1048565.10	1050769.17
20	95042.53	305649.28	321592.10	997791.80	1048522.34	1050730.54
34	95033.48	305348.70	321306.44	997787.66	1048479.61	1050691.94
47	95024.42	305048.66	321021.32	997783.53	1048436.91	1050653.39
62	95015.36	304749.15	320736.73	997779.38	1048394.25	1050614.87
77	95006.29	304450.18	320452.66	997775.23	1048351.62	1050576.39
91	94997.21	304151.73	320169.13	997771.08	1048309.03	1050537.95
07	94988.12	303853.81	319886.13	997766.93	1048266.47	1050499.54
23	94979.02	303556.41	319603.65	997762.77	1048223.94	1050461.17
40	94969.91	303259.54	319321.70	997758.60	1048181.45	1050422.84
56	94960.80	302963.20	319040.28	997754.44	1048138.99	1050384.50
74	94951.68	302667.37	318759.37	997750.26	1048096.56	1050346.35
91	94942.55	302372.07	318478.99	997746.09	1048054.17	1050308.08
09	94933.41	302077.28	318199.13	997741.91	1048011.81	1050269.90
28	94924.26	301783.01	317919.78	997737.72	1047969.48	1050231.76
46	94915.11	301489.26	317640.95	997733.54	1047927.18	1050193.65
66	94905.95	301196.02	317362.64	997729.34	1047884.92	1050155.58
85	94896.78	300903.30	317084.84	997725.15	1047842.70	1050117.55
05	94887.60	300611.03	316807.56	997720.95	1047800.50	1050079.55
26	94878.41	300319.39	316530.78	997716.74	1047758.34	1050041.60
47	94869.22	300028.20	316254.52	997712.53	1047716.21	1050003.67
68	94860.02	299737.51	315978.76	997708.32	1047674.11	1049965.79
90	94850.81	299447.34	315703.51	997704.10	1047632.05	1049927.94
12	94841.59	299157.66	315428.77	997700.88	1047590.03	1049890.13
34	94832.36	298868.50	315154.53	997696.66	1047548.01	1049852.26
57	94823.13	298579.83	314880.79	997692.43	1047506.05	1049814.62
80	94813.89	298291.66	314607.56	997688.20	1047464.11	1049776.92
04	94804.64	298004.00	314334.83	997683.96	1047422.21	1049739.25
28	94795.38	297716.83	314062.59	997679.72	1047380.34	1049701.62
53	94786.11	297430.16	313790.86	997675.47	1047338.50	1049664.03
78	94776.84	297143.99	313519.62	997671.22	1047296.69	1049626.47
03	94767.56	296858.31	313248.87	997666.97	1047254.92	1049588.95
29	94758.27	296573.12	312978.62	997662.71	1047213.18	1049551.47
55	94748.97	296288.42	312708.86	997658.45	1047171.47	1049514.02
82	94739.66	296004.22	312439.59	997654.18	1047129.79	1049476.61
09	94730.35	295720.50	312170.81	997649.92	1047088.14	1049439.23
36	94721.03	295437.27	311902.52	997645.64	1047046.53	1049401.89
64	94711.70	295154.53	311634.72	997641.36	1047004.95	1049364.58
92	94702.36	294872.27	311367.40	997637.08	1046963.39	1049327.31
21	94693.01	294590.50	311100.57	997632.79	1046921.87	1049290.08
50	94683.66	294309.21	310834.22	997628.50	1046880.39	1049252.88
79	94674.30	294028.40	310568.35	997624.21	1046838.93	1049215.72
09	94664.93	293748.07	310302.96	997619.91	1046797.50	1049178.59
39	94655.55	293468.22	310038.05	997615.61	1046756.11	1049141.50
70	94646.16	293188.85	309773.63	997611.30	1046714.74	1049104.44
01	94636.76	292909.95	309509.67	997606.99	1046673.41	1049067.42
33	94627.36	292631.52	309246.20	997602.67	1046632.11	1049030.44
64	94617.95	292353.58	308983.19	997598.36	1046590.84	1048993.49
97	94608.53	292076.10	308720.66	997593.03	1046549.60	1048956.57
30	94599.10	291799.10	308458.60	997588.70	1046508.39	1048919.69
62	94589.67	291522.56	308197.02	997584.37	1046467.22	1048882.84
96	94580.23	291246.49	307935.90	997579.04	1046426.07	1048846.03
30	94570.78	290970.83	307675.25	997574.70	1046384.95	1048809.26
65	94561.32	290695.76	307415.07	997570.38	1046343.87	1048772.51
99	94551.85	290421.09	307155.35	997566.01	1046302.81	1048735.81

19	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
0	32556.82	34432.76	105762.07	951264.19	953697.19	1002432.99
1	32584.32	34465.30	105772.67	951300.86	953738.21	1002437.35
2	32611.82	34497.85	105783.28	951337.50	953779.20	1002441.70
3	32639.31	34530.40	105793.90	951374.10	953820.17	1002446.06
4	32666.81	34562.96	105804.53	951410.67	953861.10	1002450.43
5	32694.30	34595.53	105815.17	951447.21	953902.00	1002454.79
6	32721.79	34628.10	105825.83	951483.71	953942.87	1002459.17
7	32749.28	34660.68	105836.49	951520.17	953983.71	1002463.54
8	32776.76	34693.27	105847.17	951556.60	954024.53	1002467.92
9	32804.24	34725.86	105857.86	951593.00	954065.31	1002472.31
10	32831.72	34758.46	105868.55	951629.36	954106.06	1002476.70
11	32859.19	34791.07	105879.26	951665.69	954146.78	1002481.09
12	32886.66	34823.68	105889.99	951701.98	954187.47	1002485.49
13	32914.13	34856.30	105900.72	951738.24	954228.13	1002489.89
14	32941.60	34888.93	105911.46	951774.47	954268.77	1002494.30
15	32969.06	34921.56	105922.21	951810.66	954309.37	1002498.71
16	32996.52	34954.20	105932.98	951846.82	954349.94	1002503.12
17	33023.98	34986.85	105943.76	951882.95	954390.48	1002507.54
18	33051.44	35019.50	105954.54	951919.04	954431.00	1002511.96
19	33078.89	35052.16	105965.34	951955.10	954471.48	1002516.39
20	33106.34	35084.83	105976.15	951991.12	954511.93	1002520.82
21	33133.79	35117.50	105986.97	952027.11	954552.36	1002525.25
22	33161.23	35150.18	105997.81	952063.07	954592.76	1002529.69
23	33188.67	35182.87	106008.65	952098.96	954633.12	1002534.13
24	33216.11	35215.56	106019.51	952134.88	954673.46	1002538.58
25	33243.55	35248.26	106030.37	952170.74	954713.77	1002543.03
26	33270.98	35280.97	106041.25	952206.56	954754.05	1002547.48
27	33298.41	35313.68	106052.14	952242.35	954794.30	1002551.94
28	33325.84	35346.40	106063.04	952278.11	954834.52	1002556.41
29	33353.27	35379.13	106073.95	952313.83	954874.71	1002560.87
30	33380.69	35411.86	106084.87	952349.53	954914.87	1002565.34
31	33408.10	35444.60	106095.80	952385.18	954955.00	1002569.82
32	33435.52	35477.35	106106.75	952420.81	954995.11	1002574.30
33	33462.93	35510.10	106117.70	952456.40	955035.19	1002578.78
34	33490.34	35542.86	106128.67	952491.96	955075.23	1002583.27
35	33517.75	35575.63	106139.65	952527.49	955115.25	1002587.76
36	33545.16	35608.40	106150.64	952562.98	955155.24	1002592.26
37	33572.56	35641.18	106161.64	952598.44	955195.21	1002596.76
38	33599.96	35673.97	106172.65	952633.87	955235.14	1002601.27
39	33627.35	35706.76	106183.67	952669.27	955275.04	1002605.78
40	33654.75	35739.56	106194.71	952704.63	955314.92	1002610.29
41	33682.14	35772.37	106205.75	952739.97	955354.77	1002614.81
42	33709.53	35805.18	106216.81	952775.26	955394.59	1002619.33
43	33736.91	35837.99	106227.88	952810.53	955434.38	1002623.85
44	33764.29	35870.83	106238.96	952845.77	955474.15	1002628.38
45	33791.67	35903.67	106250.05	952880.97	955513.88	1002632.91
46	33819.05	35936.51	106261.15	952916.14	955553.59	1002637.45
47	33846.42	35969.36	106272.27	952951.28	955593.27	1002641.99
48	33873.79	36002.22	106283.39	952986.38	955632.92	1002646.54
49	33901.16	36035.08	106294.53	953021.46	955672.55	1002651.09
50	33928.53	36067.95	106305.68	953056.50	955712.14	1002655.65
51	33955.89	36100.83	106316.84	953091.51	955751.71	1002660.20
52	33983.25	36133.71	106328.01	953126.49	955791.25	1002664.77
53	34010.60	36166.60	106339.19	953161.43	955830.77	1002669.33
54	34037.95	36199.50	106350.38	953196.35	955870.25	1002673.90
55	34065.30	36232.40	106361.58	953231.23	955909.71	1002678.48
56	34092.65	36265.31	106372.80	953266.08	955949.14	1002683.06
57	34120.00	36298.23	106384.03	953300.90	955988.54	1002687.64
58	34147.34	36331.15	106395.27	953335.69	956027.92	1002692.23
59	34174.68	36364.08	106406.52	953370.44	956067.27	1002696.82
60	34202.02	36397.02	106417.78	953405.17	956106.59	1002701.42

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	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meologarith. pro Tangente	Tomologarith. pro Secante
2. 99	60 94551. 85	290421. 09	307155. 35	997567. 01	1046302. 81	1048735. 81
7. 35	59 94542. 38	290146. 88	306896. 10	997562. 65	1046261. 79	1048699. 14
1. 70	58 94532. 90	289873. 14	306637. 31	997558. 30	1046220. 80	1048662. 50
6. 06	57 94523. 41	289599. 86	306378. 98	997553. 94	1046179. 83	1048625. 90
0. 43	56 94513. 91	289327. 04	306121. 11	997549. 57	1046138. 90	1048589. 33
4. 79	55 94504. 40	289054. 67	305863. 70	997545. 21	1046098. 00	1048552. 79
9. 17	54 94494. 89	288782. 77	305606. 75	997540. 83	1046057. 13	1048516. 29
3. 54	53 94485. 37	288511. 32	305350. 26	997536. 46	1046016. 29	1048479. 83
7. 02	52 94475. 84	288240. 33	305094. 23	997532. 08	1045975. 47	1048443. 40
1. 31	51 94466. 30	287969. 79	304838. 64	997527. 69	1045934. 69	1048407. 00
5. 70	50 94456. 75	287699. 70	304583. 52	997523. 30	1045893. 94	1048370. 64
0. 09	49 94447. 20	287430. 07	304328. 84	997518. 91	1045853. 22	1048334. 31
4. 49	48 94437. 64	287160. 88	304074. 62	997514. 51	1045812. 53	1048298. 02
8. 89	47 94428. 07	286892. 15	303820. 84	997510. 11	1045771. 87	1048261. 76
3. 30	46 94418. 49	286623. 86	303567. 75	997505. 70	1045731. 23	1048225. 53
7. 71	45 94408. 90	286356. 02	303314. 64	997501. 29	1045690. 63	1048189. 34
1. 12	44 94399. 31	286088. 63	303062. 21	997496. 88	1045650. 06	1048153. 18
5. 54	43 94389. 71	285821. 68	302810. 23	997492. 46	1045609. 52	1048117. 05
9. 96	42 94380. 10	285555. 17	302558. 68	997488. 04	1045569. 00	1048080. 96
3. 39	41 94370. 48	285289. 11	302307. 59	997483. 61	1045528. 52	1048044. 90
7. 82	40 94360. 85	285023. 49	302056. 93	997479. 18	1045488. 07	1048008. 88
1. 25	39 94351. 21	284758. 31	301806. 72	997474. 75	1045447. 64	1047972. 89
5. 69	38 94341. 57	284493. 56	301556. 94	997470. 31	1045407. 24	1047936. 93
9. 13	37 94331. 92	284229. 26	301307. 60	997465. 87	1045366. 88	1047901. 01
3. 58	36 94322. 26	283965. 39	301058. 70	997461. 42	1045326. 54	1047865. 12
7. 03	35 94312. 60	283701. 96	300810. 24	997456. 97	1045286. 23	1047829. 26
1. 48	34 94302. 93	283438. 96	300562. 21	997452. 52	1045245. 95	1047793. 44
5. 94	33 94293. 25	283176. 39	300314. 62	997448. 06	1045205. 70	1047757. 65
9. 41	32 94283. 56	282914. 26	300067. 46	997443. 59	1045165. 48	1047721. 89
3. 87	31 94273. 86	282652. 56	299820. 73	997439. 13	1045125. 29	1047686. 17
7. 34	30 94264. 15	282391. 29	299574. 43	997434. 66	1045085. 13	1047650. 47
1. 82	29 94254. 43	282130. 45	299328. 56	997430. 18	1045045. 00	1047614. 82
5. 30	28 94244. 71	281870. 03	299083. 12	997425. 70	1045004. 89	1047579. 19
9. 78	27 94234. 98	281610. 04	298838. 11	997421. 22	1044964. 81	1047543. 60
3. 27	26 94225. 24	281350. 48	298593. 52	997416. 73	1044924. 77	1047508. 04
7. 76	25 94215. 50	281091. 34	298349. 36	997412. 24	1044884. 75	1047472. 51
1. 26	24 94205. 75	280832. 63	298105. 63	997407. 74	1044844. 76	1047437. 02
5. 76	23 94195. 91	280574. 33	297862. 31	997403. 24	1044804. 79	1047401. 56
9. 27	22 94186. 22	280316. 46	297619. 42	997398. 73	1044764. 86	1047366. 13
3. 78	21 94176. 44	280059. 01	297376. 95	997394. 22	1044724. 96	1047330. 73
7. 29	20 94166. 65	279801. 98	297134. 90	997389. 71	1044685. 08	1047295. 37
1. 81	19 94156. 85	279545. 37	296893. 27	997385. 19	1044645. 23	1047260. 03
5. 33	18 94147. 05	279289. 17	296652. 05	997380. 67	1044605. 41	1047224. 74
9. 85	17 94137. 24	279033. 39	296411. 25	997376. 15	1044565. 62	1047189. 47
3. 38	16 94127. 42	278778. 02	296170. 87	997371. 62	1044525. 85	1047154. 23
7. 91	15 94117. 50	278523. 07	295930. 90	997367. 09	1044486. 12	1047119. 03
1. 45	14 94107. 77	278268. 53	295691. 35	997362. 55	1044446. 41	1047083. 86
5. 99	13 94097. 93	278014. 40	295452. 21	997358. 01	1044406. 73	1047048. 72
9. 54	12 94088. 08	277760. 69	295213. 48	997353. 46	1044367. 08	1047013. 62
3. 09	11 94078. 22	277507. 38	294975. 16	997348. 91	1044327. 45	1046978. 54
7. 65	10 94068. 35	277254. 48	294737. 25	997344. 35	1044287. 86	1046943. 50
1. 20	9 94058. 48	277001. 99	294499. 75	997339. 80	1044247. 29	1046908. 49
5. 77	8 94048. 60	276749. 90	294262. 65	997335. 23	1044208. 75	1046873. 51
9. 33	7 94038. 71	276498. 22	294025. 97	997330. 67	1044169. 23	1046838. 57
3. 90	6 94028. 81	276246. 95	293789. 68	997326. 10	1044129. 75	1046803. 65
7. 48	5 94018. 90	275996. 08	293553. 80	997321. 52	1044090. 29	1046768. 77
1. 06	4 94009. 09	275745. 61	293318. 33	997316. 94	1044050. 86	1046733. 92
5. 64	3 93999. 07	275495. 54	293083. 26	997312. 36	1044011. 46	1046699. 10
9. 23	2 93989. 14	275245. 88	292848. 58	997307. 77	1043972. 08	1046664. 31
3. 82	1 93979. 20	274996. 61	292614. 31	997303. 18	1043932. 73	1046629. 56
7. 43	0 93969. 26	274747. 74	292380. 44	997298. 58	1043893. 41	1046594. 83

20	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
0	34202.02	36397.02	106417.78	953405.17	956106.59	1002701.42
1	34229.25	36429.97	106429.05	953439.86	956145.88	1002706.02
2	34256.68	36462.92	106440.33	953474.52	956185.15	1002710.62
3	34284.01	36495.88	106451.63	953509.45	956224.39	1002715.23
4	34311.23	36528.85	106462.94	953543.75	956263.60	1002719.84
5	34338.65	36561.82	106474.26	953578.32	956302.78	1002724.45
6	34365.97	36594.80	106485.59	953612.86	956341.94	1002729.08
7	34393.29	36627.79	106496.93	953647.37	956381.07	1002733.71
8	34420.60	36660.79	106508.28	953681.84	956420.18	1002738.34
9	34447.91	36693.79	106519.64	953716.28	956459.25	1002742.97
10	34475.22	36726.80	106531.01	953750.70	956498.31	1002747.61
11	34502.52	36759.82	106542.40	953785.08	956537.33	1002752.25
12	34529.82	36792.84	106553.80	953819.43	956576.33	1002756.90
13	34557.12	36825.87	106565.21	953853.75	956615.30	1002761.55
14	34584.41	36858.91	106576.63	953888.04	956654.24	1002766.20
15	34611.71	36891.95	106588.07	953922.30	956693.16	1002770.80
16	34639.00	36925.00	106599.51	953956.53	956732.05	1002775.41
17	34666.29	36958.06	106610.97	953990.73	956770.91	1002780.01
18	34693.57	36991.13	106622.43	954024.89	956809.75	1002784.86
19	34720.85	37024.20	106633.9	954059.03	956848.56	1002789.53
20	34748.13	37057.28	106645.4	954093.14	956887.35	1002794.21
21	34775.40	37090.37	106656.96	954127.24	956926.11	1002798.90
22	34802.67	37123.46	106668.42	954161.26	956964.84	1002803.58
23	34829.94	37156.54	106679.94	954195.27	957003.55	1002808.28
24	34857.21	37189.67	106691.48	954229.26	957042.23	1002812.97
25	34884.47	37222.78	106703.02	954263.22	957080.88	1002817.67
26	34911.73	37255.90	106714.58	954297.13	957119.51	1002822.38
27	34938.99	37289.01	106726.15	954331.03	957158.11	1002827.09
28	34966.24	37322.17	106737.74	954364.88	957196.66	1002831.80
29	34993.49	37355.32	106749.34	954398.7	957235.24	1002836.52
30	35020.74	37388.47	106760.94	954432.53	957273.77	1002841.24
31	35047.99	37421.63	106772.55	954466.30	957312.27	1002845.96
32	35075.23	37454.79	106784.18	954500.05	957350.74	1002850.69
33	35102.47	37487.97	106795.82	954533.76	957389.19	1002855.43
34	35129.70	37521.15	106807.47	954567.45	957427.61	1002860.16
35	35156.93	37554.34	106819.14	954601.10	957466.01	1002864.91
36	35184.16	37587.53	106830.81	954634.72	957504.38	1002869.65
37	35211.39	37620.73	106842.50	954668.32	957542.72	1002874.40
38	35238.62	37653.94	106854.20	954701.89	957581.04	1002879.16
39	35265.84	37687.16	106865.91	954735.42	957619.34	1002883.92
40	35293.06	37720.38	106877.63	954768.93	957657.61	1002888.68
41	35320.27	37753.61	106889.36	954802.40	957695.85	1002893.45
42	35347.48	37786.85	106901.10	954835.85	957734.07	1002898.22
43	35374.69	37820.10	106912.86	954869.27	957772.26	1002902.99
44	35401.90	37853.35	106924.63	954902.66	957810.43	1002907.77
45	35429.10	37886.61	106936.41	954936.02	957848.58	1002912.56
46	35456.30	37919.88	106948.20	954969.35	957886.69	1002917.35
47	35483.50	37953.16	106960.00	955002.65	957924.79	1002922.14
48	35510.70	37986.44	106971.82	955035.92	957962.86	1002926.94
49	35537.89	38019.73	106983.64	955069.16	958000.90	1002931.74
50	35565.08	38053.03	106995.48	955102.37	958038.92	1002936.54
51	35592.26	38086.33	107007.33	955135.56	958076.91	1002941.35
52	35619.44	38119.64	107019.19	955168.71	958114.88	1002946.17
53	35646.62	38152.96	107031.06	955201.84	958152.82	1002950.98
54	35673.80	38186.29	107042.95	955234.94	958190.74	1002955.81
55	35700.97	38219.62	107054.84	955268.01	958228.64	1002960.63
56	35728.14	38252.96	107066.75	955301.05	958266.51	1002965.46
57	35755.31	38286.31	107078.67	955334.06	958304.35	1002970.30
58	35782.48	38319.67	107090.60	955367.04	958342.17	1002975.14
59	35809.64	38353.03	107102.54	955400.00	958379.97	1002979.98
60	35836.79	38386.40	107114.50	955432.92	958417.74	1002984.83

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
60	93969.26	274747.74	292380.44	997298.58	1043893.41	1046594.82
59	93959.31	274499.27	292146.97	997293.98	1043854.12	1046560.14
58	93947.85	274251.20	291913.89	997289.38	1043814.85	1046525.48
57	93939.38	274003.52	291681.21	997284.77	1043775.61	1046490.85
56	93929.40	273756.23	291448.92	997280.16	1043736.40	1046456.25
55	93919.42	273509.34	291217.03	997275.54	1043697.22	1046421.68
54	93909.43	273262.84	290985.53	997270.92	1043658.06	1046387.14
53	93899.43	273016.74	290754.43	997266.29	1043618.93	1046352.63
52	93889.42	272771.02	290523.72	997261.66	1043579.82	1046318.16
51	93879.40	272525.63	290293.39	997257.03	1043540.75	1046283.72
50	93869.37	272280.75	290063.46	997252.39	1043501.69	1046249.30
49	93859.34	272036.20	289833.91	997247.75	1043462.67	1046214.92
48	93849.30	271792.04	289604.75	997243.10	1043423.67	1046180.57
47	93839.25	271548.26	289375.98	997238.45	1043384.70	1046146.25
46	93829.19	271304.87	289147.60	997233.80	1043345.76	1046111.96
45	93819.13	271061.86	288919.59	997229.14	1043306.84	1046077.70
44	93809.06	270819.23	288691.98	997224.48	1043267.95	1046043.47
43	93798.98	270576.99	288464.74	997219.81	1043229.09	1046009.27
42	93788.89	270335.13	288237.89	997215.14	1043190.25	1045975.11
41	93778.79	270093.64	288011.42	997210.47	1043151.44	1045940.97
40	93768.63	269852.54	287785.33	997205.79	1043112.65	1045906.86
39	93758.58	269611.81	287559.61	997201.10	1043073.89	1045872.79
38	93748.46	269371.47	287334.28	997196.42	1043035.16	1045838.74
37	93738.33	269131.49	287109.32	997191.72	1042996.45	1045804.73
36	93728.19	268891.60	286884.74	997187.03	1042957.77	1045770.74
35	93718.05	268651.67	286660.53	997182.33	1042919.12	1045736.79
34	93707.90	268413.83	286436.70	997177.62	1042880.49	1045702.87
33	93697.74	268175.35	286213.24	997172.91	1042841.89	1045668.97
32	93687.57	267937.25	285990.15	997168.20	1042803.31	1045635.11
31	93677.40	267699.51	285767.44	997163.48	1042764.76	1045601.27
30	93667.22	267462.15	285545.09	997158.76	1042726.23	1045567.47
29	93657.03	267225.16	285323.12	997154.04	1042687.73	1045533.70
28	93646.83	266988.53	285101.52	997149.31	1042649.26	1045499.95
27	93636.62	266752.27	284880.28	997144.57	1042610.81	1045466.24
26	93626.40	266516.38	284659.41	997139.84	1042572.39	1045432.55
25	93616.18	266280.85	284438.91	997135.09	1042533.99	1045398.90
24	93605.95	266045.69	284218.77	997130.35	1042495.62	1045365.28
23	93595.71	265810.89	283998.99	997125.60	1042457.28	1045331.68
22	93585.46	265576.45	283779.58	997120.84	1042418.96	1045298.11
21	93575.21	265342.38	283560.54	997116.08	1042380.66	1045264.58
20	93564.95	265108.67	283341.85	997111.32	1042342.39	1045231.07
19	93554.68	264875.31	283123.53	997106.55	1042304.15	1045197.60
18	93544.40	264642.32	282905.56	997101.78	1042265.93	1045164.15
17	93534.11	264409.69	282687.96	997097.01	1042227.74	1045130.73
16	93523.82	264177.41	282470.71	997092.23	1042189.57	1045097.34
15	93513.52	263945.49	282253.82	997087.44	1042151.42	1045063.98
14	93503.21	263713.92	282037.20	997082.65	1042113.31	1045030.65
13	93492.89	263482.71	281821.11	997077.86	1042075.21	1044997.35
12	93482.56	263251.86	281605.29	997073.06	1042037.11	1044964.08
11	93472.23	263021.36	281389.82	997068.26	1041999.10	1044930.84
10	93461.89	262791.21	281174.71	997063.46	1041961.08	1044897.63
9	93451.54	262561.41	280959.95	997058.65	1041923.09	1044864.44
8	93441.18	262331.96	280745.54	997053.83	1041885.12	1044831.29
7	93430.82	262102.86	280531.48	997049.02	1041847.18	1044798.10
6	93420.45	261874.11	280317.77	997044.19	1041809.26	1044765.06
5	93410.07	261645.71	280104.41	997039.37	1041771.36	1044731.99
4	93399.68	261417.66	279891.40	997034.54	1041733.49	1044698.95
3	93389.28	261189.95	279678.73	997029.70	1041695.65	1044665.94
2	93378.87	260962.59	279466.41	997024.86	1041657.83	1044632.90
1	93368.46	260735.58	279254.44	997020.02	1041620.03	1044600.01
0	93358.04	260508.91	279042.81	997015.17	1041582.26	1044567.08

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21	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
0	35836.79	38386.40	107114.50	955432.92	958417.74	1002984.83
1	35863.95	38419.78	107126.47	955465.81	958455.49	1002989.68
2	35891.10	38453.17	107138.44	955498.68	958493.21	1002994.53
3	35918.25	38486.56	107150.41	955531.52	958530.91	1002999.39
4	35945.40	38519.96	107162.44	955564.33	958568.59	1003004.26
5	35972.54	38553.37	107174.45	955597.11	958606.24	1003009.13
6	35999.68	38586.79	107186.47	955629.87	958643.86	1003014.00
7	36026.82	38620.21	107198.51	955662.59	958681.47	1003018.88
8	36053.95	38653.64	107210.56	955695.29	958719.04	1003023.76
9	36081.08	38687.08	107222.62	955727.96	958756.60	1003028.64
10	36108.21	38720.53	107234.69	955760.60	958794.13	1003033.53
11	36135.33	38753.98	107246.78	955793.21	958831.63	1003038.42
12	36162.46	38787.44	107258.87	955825.79	958869.12	1003043.32
13	36189.58	38820.91	107270.98	955858.35	958906.57	1003048.23
14	36216.69	38854.39	107283.10	955890.88	958944.01	1003053.13
15	36243.80	38887.87	107295.23	955923.38	958981.42	1003058.04
16	36270.91	38921.36	107307.37	955955.85	959018.81	1003062.96
17	36298.02	38954.86	107319.53	955988.29	959056.17	1003067.88
18	36325.12	38988.37	107331.70	956020.71	959093.51	1003072.80
19	36352.22	39021.89	107343.88	956053.10	959130.82	1003077.73
20	36379.32	39055.41	107356.07	956085.46	959168.12	1003082.66
21	36406.41	39088.94	107368.27	956117.79	959205.39	1003087.59
22	36433.50	39122.48	107380.48	956150.10	959242.63	1003092.54
23	36460.59	39156.02	107392.71	956182.37	959279.85	1003097.48
24	36487.68	39189.57	107404.95	956214.62	959317.05	1003102.43
25	36514.76	39223.13	107417.20	956246.85	959354.23	1003107.38
26	36541.84	39256.70	107429.46	956279.04	959391.38	1003112.34
27	36568.92	39290.28	107441.73	956311.21	959428.51	1003117.30
28	36596.99	39323.86	107454.02	956343.35	959465.61	1003122.27
29	36623.06	39357.45	107466.31	956375.46	959502.69	1003127.24
30	36650.13	39391.05	107478.62	956407.54	959539.75	1003132.21
31	36677.19	39424.66	107490.95	956439.60	959576.79	1003137.19
32	36704.25	39458.27	107503.28	956471.63	959613.80	1003142.17
33	36731.31	39491.89	107515.62	956503.63	959650.79	1003147.16
34	36758.36	39525.52	107527.98	956535.61	959687.76	1003152.15
35	36785.41	39559.16	107540.35	956567.56	959724.70	1003157.14
36	36812.46	39592.80	107552.73	956599.48	959761.62	1003162.14
37	36839.50	39626.45	107565.12	956631.37	959798.52	1003167.15
38	36866.54	39660.11	107577.53	956663.24	959835.40	1003172.16
39	36893.58	39693.78	107589.95	956695.08	959872.25	1003177.17
40	36920.62	39727.46	107602.37	956726.89	959909.08	1003182.19
41	36947.65	39761.14	107614.81	956758.68	959945.88	1003187.21
42	36974.68	39794.83	107627.27	956790.44	959982.67	1003192.23
43	37001.70	39828.53	107639.73	956822.17	960019.43	1003197.26
44	37028.72	39862.24	107652.21	956853.87	960056.17	1003202.29
45	37055.74	39895.96	107664.70	956885.55	960092.89	1003207.33
46	37082.76	39929.68	107677.20	956917.21	960129.58	1003212.37
47	37109.77	39963.41	107689.71	956948.83	960166.25	1003217.42
48	37136.78	39997.15	107702.24	956980.43	960202.90	1003222.47
49	37163.79	40030.89	107714.77	957012.00	960239.53	1003227.53
50	37190.80	40064.65	107727.32	957043.55	960276.13	1003232.59
51	37217.80	40098.41	107739.88	957075.06	960312.71	1003237.65
52	37244.80	40132.18	107752.46	957106.56	960349.27	1003242.72
53	37271.79	40165.96	107765.04	957138.02	960385.81	1003247.79
54	37298.78	40199.75	107777.64	957169.46	960422.33	1003252.87
55	37325.77	40233.54	107790.25	957200.87	960458.82	1003257.95
56	37352.75	40267.34	107802.87	957232.26	960495.29	1003263.03
57	37379.73	40301.15	107815.50	957263.62	960531.74	1003268.12
58	37406.71	40334.97	107828.15	957294.95	960568.17	1003273.21
59	37433.69	40368.79	107840.80	957326.26	960604.57	1003278.31
60	37460.66	40402.62	107853.47	957357.54	960640.96	1003283.41

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologarith. pro Tangente	Tomologarith. pro Secante
60	93358.04	260508.91	279042.81	997015.17	1041582.26	1044567.03
59	93347.61	260282.58	278831.53	997010.32	1041544.51	1044534.19
58	93337.17	260056.59	278620.59	997005.47	1041506.79	1044501.32
57	93326.73	259830.95	278409.99	997000.61	1041469.09	1044468.48
56	93316.28	259605.64	278199.73	996995.74	1041431.41	1044435.67
55	93305.82	259380.68	277989.82	996990.87	1041393.76	1044402.89
54	93295.35	259156.06	277780.24	996986.00	1041356.14	1044370.13
53	93284.87	258931.77	277571.00	996981.12	1041318.53	1044337.41
52	93274.39	258707.82	277362.11	996976.24	1041280.96	1044304.71
51	93263.90	258484.21	277153.55	996971.36	1041243.40	1044272.04
50	93253.40	258260.94	276945.32	996966.47	1041205.87	1044239.40
49	93242.89	258038.00	276737.43	996961.58	1041168.37	1044206.79
48	93232.38	257815.39	276529.88	996956.68	1041130.88	1044174.21
47	93221.86	257593.12	276322.66	996951.77	1041093.43	1044141.65
46	93211.33	257371.18	276115.78	996946.87	1041055.99	1044109.12
45	93200.79	257149.57	275909.23	996941.96	1041018.58	1044076.62
44	93190.24	256928.30	275703.01	996937.04	1040981.19	1044044.15
43	93179.68	256707.35	275497.12	996932.12	1040943.83	1044011.71
42	93169.12	256486.74	275291.57	996927.20	1040906.49	1043979.29
41	93158.55	256266.45	275086.34	996922.27	1040869.18	1043946.90
40	93147.97	256046.49	274881.44	996917.34	1040831.88	1043914.54
39	93137.38	255826.86	274676.87	996912.41	1040794.61	1043882.21
38	93126.79	255607.58	274472.63	996907.46	1040757.37	1043849.90
37	93116.19	255388.58	274268.71	996902.52	1040720.15	1043817.63
36	93105.58	255169.92	274065.12	996897.57	1040682.95	1043785.38
35	93094.96	254951.60	273861.86	996892.62	1040645.77	1043753.15
34	93084.33	254733.59	273658.02	996887.66	1040608.62	1043720.96
33	93073.70	254515.91	273454.30	996882.70	1040571.49	1043688.79
32	93063.06	254298.55	273251.00	996877.73	1040534.39	1043656.65
31	93052.41	254081.51	273047.03	996872.76	1040497.31	1043624.54
30	93041.75	253864.79	272843.38	996867.79	1040460.25	1043592.46
29	93031.09	253648.39	272640.05	996862.81	1040423.21	1043560.40
28	93020.42	253432.31	272437.04	996857.83	1040386.20	1043528.37
27	93009.74	253216.55	272234.35	996852.84	1040349.21	1043496.37
26	92999.05	253001.11	272031.98	996847.85	1040312.24	1043464.39
25	92988.35	252785.98	271829.93	996842.86	1040275.30	1043432.44
24	92977.65	252571.17	271627.19	996837.86	1040238.38	1043400.52
23	92966.94	252356.67	271424.77	996832.85	1040201.48	1043368.63
22	92956.22	252142.40	271222.66	996827.84	1040164.60	1043336.76
21	92945.49	251928.63	271020.87	996822.83	1040127.75	1043304.92
20	92934.75	251715.07	270819.39	996817.81	1040090.92	1043273.11
19	92924.01	251501.83	270617.23	996812.79	1040054.12	1043241.32
18	92913.26	251288.90	270415.38	996807.77	1040017.33	1043209.56
17	92902.50	251076.20	270213.84	996802.74	1039980.57	1043177.83
16	92891.73	250863.98	270012.61	996797.71	1039943.83	1043146.13
15	92880.95	250651.92	269811.70	996792.67	1039907.11	1043114.45
14	92870.17	250440.29	269610.09	996787.63	1039870.42	1043082.79
13	92859.38	250228.91	269408.79	996782.58	1039833.75	1043051.17
12	92848.58	250017.84	269207.80	996777.53	1039797.10	1043019.57
11	92837.77	249807.07	269007.12	996772.47	1039760.47	1042988.00
10	92826.96	249596.61	268806.74	996767.41	1039723.87	1042956.45
9	92816.14	249386.45	268606.67	996762.35	1039687.29	1042924.94
8	92805.31	249176.60	268406.91	996757.28	1039650.73	1042893.44
7	92794.47	248967.06	268207.45	996752.21	1039614.19	1042861.98
6	92783.62	248757.81	268008.30	996747.13	1039577.67	1042830.54
5	92772.77	248548.87	267809.45	996742.05	1039541.18	1042799.13
4	92761.91	248340.23	267610.90	996736.97	1039504.71	1042767.74
3	92751.04	248131.90	267412.65	996731.88	1039468.26	1042736.38
2	92740.16	247923.86	267214.70	996726.79	1039431.83	1042705.05
1	92729.28	247716.12	267017.06	996721.69	1039395.43	1042673.74
0	92718.39	247508.69	266819.72	996716.59	1039359.04	1042642.46

22	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	37460.66	40402.62	107853.47	957357.54	960640.96	1003283.41
1	37487.63	40436.46	107866.16	957388.80	960677.31	1003288.52
2	37514.59	40470.31	107878.85	957420.03	960713.66	1003293.63
3	37541.56	40504.17	107891.56	957451.23	960749.97	1003298.75
4	37568.52	40538.04	107904.27	957482.40	960786.27	1003303.86
5	37595.47	40571.01	107917.00	957513.56	960822.54	1003308.99
6	37622.43	40605.79	107929.75	957544.68	960858.80	1003314.12
7	37649.38	40639.64	107942.50	957575.78	960895.03	1003319.25
8	37676.32	40673.58	107955.27	957606.85	960931.24	1003324.38
9	37703.27	40707.48	107968.05	957637.90	960967.42	1003329.52
10	37730.21	40741.39	107980.84	957668.92	961003.59	1003334.67
11	37757.14	40775.31	107993.64	957699.01	961039.73	1003339.82
12	37784.08	40809.24	108006.46	957730.88	961075.86	1003344.97
13	37811.01	40843.18	108019.28	957761.83	961111.96	1003350.13
14	37837.94	40877.13	108032.12	957792.75	961148.04	1003355.20
15	37864.86	40911.08	108044.97	957823.64	961184.09	1003360.46
16	37891.78	40945.04	108057.84	957854.50	961220.13	1003365.63
17	37918.70	40979.01	108070.71	957885.35	961256.15	1003370.80
18	37945.62	41012.99	108083.60	957916.16	961292.14	1003375.98
19	37972.53	41046.97	108096.50	957946.95	961328.12	1003381.16
20	37999.44	41080.97	108109.42	957977.72	961364.07	1003386.35
21	38026.34	41114.97	108122.34	958008.45	961400.00	1003391.54
22	38053.24	41148.98	108135.28	958039.17	961435.91	1003396.74
23	38080.14	41183.00	108148.23	958069.86	961471.80	1003401.94
24	38107.04	41217.03	108161.19	958100.52	961507.66	1003407.15
25	38133.93	41251.06	108174.17	958131.16	961543.51	1003412.36
26	38160.82	41285.10	108187.15	958161.77	961579.34	1003417.57
27	38187.70	41319.15	108200.15	958192.36	961615.14	1003422.79
28	38214.59	41353.21	108213.16	958222.92	961650.93	1003428.01
29	38241.47	41387.28	108226.18	958253.45	961686.69	1003433.23
30	38268.34	41421.30	108239.22	958283.97	961722.43	1003438.47
31	38295.22	41455.44	108252.27	958314.45	961758.15	1003443.70
32	38322.09	41489.53	108265.33	958344.91	961793.85	1003448.94
33	38348.95	41523.63	108278.40	958375.35	961829.53	1003454.18
34	38375.82	41557.74	108291.49	958405.76	961865.19	1003459.43
35	38402.68	41591.85	108304.58	958436.15	961900.83	1003464.68
36	38429.53	41625.99	108317.69	958466.51	961936.45	1003469.94
37	38456.39	41660.12	108330.81	958496.85	961972.05	1003475.20
38	38483.24	41694.26	108343.95	958527.16	962007.62	1003480.47
39	38510.08	41728.41	108357.09	958557.45	962043.18	1003485.74
40	38536.93	41762.57	108370.25	958587.71	962078.72	1003491.01
41	38563.77	41796.74	108383.42	958617.95	962114.23	1003496.29
42	38590.60	41830.91	108396.61	958648.16	962149.74	1003501.57
43	38617.44	41865.09	108409.80	958678.35	962185.20	1003506.86
44	38644.27	41899.28	108423.01	958708.51	962220.60	1003512.15
45	38671.10	41933.48	108436.23	958738.65	962256.09	1003517.44
46	38697.92	41967.69	108449.47	958768.76	962291.50	1003522.74
47	38724.74	42001.91	108462.71	958798.85	962326.90	1003528.05
48	38751.56	42036.13	108475.97	958828.92	962362.27	1003533.35
49	38778.37	42070.36	108489.24	958858.96	962397.63	1003538.67
50	38805.18	42104.60	108502.52	958888.97	962432.95	1003543.98
51	38831.99	42138.85	108515.82	958918.97	962468.27	1003549.31
52	38858.80	42173.11	108529.13	958948.93	962503.56	1003554.63
53	38885.60	42207.35	108542.45	958978.88	962538.84	1003559.96
54	38912.39	42241.66	108555.78	959008.80	962574.09	1003565.30
55	38939.19	42275.94	108569.12	959038.69	962609.32	1003570.63
56	38965.98	42310.23	108582.48	959068.56	962644.54	1003575.98
57	38992.77	42344.53	108595.85	959098.41	962679.73	1003581.32
58	39019.55	42378.84	108609.24	959128.23	962714.91	1003586.68
59	39046.33	42413.16	108622.63	959158.03	962750.06	1003592.05
60	39073.11	42447.49	108636.04	959187.80	962785.15	1003597.39

283.41
288.52
293.63
298.73
303.86
308.99
314.12
319.25
324.38
329.52
334.67
339.82
344.97
350.13
355.29
360.46
365.63
370.80
375.98
381.16
386.35
391.54
396.74
401.94
407.15
412.36
417.57
422.79
428.01
433.23
438.47
443.70
448.94
454.18
459.43
464.68
469.94
475.20
480.47
485.74
491.01
496.29
501.57
506.86
512.15
517.44
522.74
528.05
533.35
538.67
543.98
549.31
554.63
559.96
565.30
570.63
575.98
581.32
586.68
592.03
597.39

SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
60	92718.39	247508.69	266946.72	996710.59	1039359.04
59	92707.41	247301.55	266754.67	996711.48	1039322.65
58	92696.58	247094.77	266562.02	996706.37	1039286.34
57	92685.00	246888.10	266371.48	996701.25	1039250.03
56	92674.73	246681.91	266180.33	996696.14	1039213.73
55	92663.82	246475.96	265989.47	996691.01	1039177.46
54	92652.50	246270.30	265798.41	996685.88	1039141.20
53	92641.94	246064.94	265608.65	996680.75	1039104.97
52	92630.96	245859.87	265418.68	996675.62	1039068.76
51	92620.00	245655.09	265229.07	996670.48	1039032.58
50	92609.03	245450.61	265039.62	996665.33	1038996.41
49	92598.05	245246.42	264850.54	996660.18	1038960.27
48	92587.06	245042.52	264661.74	996655.03	1038924.14
47	92576.06	244838.91	264473.23	996649.87	1038888.04
46	92565.06	244635.59	264285.02	996644.71	1038851.96
45	92554.05	244432.36	264097.09	996639.54	1038815.91
44	92543.03	244229.82	263909.46	996634.37	1038779.87
43	92532.00	244027.36	263722.11	996629.20	1038743.85
42	92520.97	243825.19	263535.05	996624.02	1038707.86
41	92509.93	243623.31	263348.28	996618.84	1038671.83
40	92498.88	243421.72	263161.80	996613.65	1038635.93
39	92487.82	243220.41	262975.60	996608.46	1038599.00
38	92476.75	243019.38	262789.60	996603.26	1038562.09
37	92465.68	242818.64	262604.06	996598.06	1038525.20
36	92454.60	242618.19	262418.72	996592.85	1038488.34
35	92443.51	242418.01	262233.66	996587.64	1038451.42
34	92432.41	242218.12	262048.88	996582.43	1038414.53
33	92421.31	242018.51	261864.39	996577.21	1038378.86
32	92410.20	241819.18	261680.18	996571.99	1038343.07
31	92399.08	241620.13	261496.24	996566.77	1038307.31
30	92387.95	241422.36	261312.59	996561.53	1038271.57
29	92376.81	241222.86	261129.22	996556.30	1038235.85
28	92365.67	241024.65	260946.13	996551.06	1038199.15
27	92354.52	240826.72	260763.32	996545.82	1038162.46
26	92343.36	240629.06	260580.78	996540.57	1038125.74
25	92332.19	240431.68	260398.52	996535.32	1038089.17
24	92321.02	240234.57	260216.54	996530.06	1038052.55
23	92309.84	240037.74	260034.84	996524.80	1038015.95
22	92298.65	239841.18	259853.41	996519.53	1037979.38
21	92287.45	239644.90	259672.25	996514.26	1037942.82
20	92276.24	239448.89	259491.37	996508.99	1037906.28
19	92265.03	239253.16	259310.77	996503.71	1037869.77
18	92253.81	239057.69	259130.43	996498.43	1037833.27
17	92242.58	238862.50	258950.37	996493.14	1037796.80
16	92231.34	238667.58	258770.58	996487.85	1037760.34
15	92220.09	238472.93	258591.07	996482.56	1037723.91
14	92208.84	238278.55	258411.82	996477.26	1037687.50
13	92197.58	238084.44	258232.84	996471.95	1037651.10
12	92186.31	237890.60	258054.14	996466.65	1037614.73
11	92175.03	237697.03	257875.70	996461.33	1037578.37
10	92163.75	237503.72	257697.53	996456.02	1037542.04
9	92152.46	237310.68	257519.63	996450.69	1037505.73
8	92141.16	237117.91	257341.99	996445.37	1037469.44
7	92129.85	236925.40	257164.62	996440.04	1037433.16
6	92118.54	236733.16	256987.52	996434.70	1037396.91
5	92107.22	236541.18	256810.69	996429.37	1037360.68
4	92095.89	236349.46	256634.12	996424.02	1037324.46
3	92084.55	236158.01	256457.81	996418.68	1037288.27
2	92073.20	235966.83	256281.76	996413.32	1037252.00
1	92061.85	235775.90	256105.99	996407.97	1037215.84
0	92050.49	235585.24	255930.47	996402.61	1037179.81

23	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
0	39073.11	42447.49	108636.04	959187.80	962785.19	1003597.39
1	39099.89	42481.82	108649.46	959217.55	962820.31	1003602.76
2	39126.66	42516.16	108661.89	959247.28	962855.40	1003608.13
3	39153.43	42550.51	108676.34	959276.08	962890.48	1003613.50
4	39180.19	42584.87	108689.79	959306.66	962925.53	1003618.88
5	39206.95	42619.24	108703.26	959336.31	962960.57	1003624.26
6	39233.71	42653.62	108716.75	959365.94	962995.58	1003629.64
7	39260.47	42688.00	108730.24	959395.55	963030.58	1003635.04
8	39287.23	42722.39	108743.75	959425.13	963065.56	1003640.43
9	39313.97	42756.79	108757.27	959454.69	963100.52	1003645.83
10	39340.71	42791.20	108770.80	959484.22	963135.45	1003651.23
11	39367.45	42825.62	108784.35	959513.73	963170.37	1003656.64
12	39394.19	42860.05	108797.91	959543.22	963205.27	1003662.05
13	39420.93	42894.49	108811.48	959572.68	963240.15	1003667.47
14	39447.66	42928.94	108825.06	959602.12	963275.01	1003672.89
15	39474.39	42963.39	108838.66	959631.54	963309.85	1003678.32
16	39501.11	42997.85	108852.27	959660.93	963344.68	1003683.75
17	39527.83	43032.32	108865.89	959690.30	963379.48	1003689.18
18	39554.55	43066.80	108879.52	959719.65	963414.26	1003694.62
19	39581.27	43101.29	108893.17	959748.97	963449.03	1003700.06
20	39607.98	43135.79	108906.83	959778.27	963483.78	1003705.51
21	39634.69	43170.30	108920.50	959807.54	963518.50	1003710.96
22	39661.39	43204.81	108934.18	959836.79	963553.21	1003716.42
23	39688.09	43239.33	108947.88	959866.02	963587.90	1003721.88
24	39714.79	43273.86	108961.59	959895.23	963622.57	1003727.34
25	39741.48	43308.40	108975.31	959924.41	963657.22	1003732.81
26	39768.17	43342.95	108989.04	959953.57	963691.85	1003738.28
27	39794.86	43377.51	109002.79	959982.70	963726.46	1003743.76
28	39821.55	43412.08	109016.55	960011.81	963761.05	1003749.24
29	39848.23	43446.66	109030.32	960040.90	963795.63	1003754.73
30	39874.91	43481.24	109044.11	960069.97	963830.19	1003760.22
31	39901.58	43515.83	109057.91	960099.01	963864.73	1003765.72
32	39928.25	43550.43	109071.72	960128.03	963899.25	1003771.22
33	39954.92	43585.04	109085.54	960157.03	963933.75	1003776.72
34	39981.58	43619.66	109099.38	960186.00	963968.23	1003782.23
35	40008.24	43654.29	109113.25	960214.95	964002.69	1003787.74
36	40034.90	43688.93	109127.09	960243.88	964037.14	1003793.26
37	40061.56	43723.58	109140.97	960272.78	964071.56	1003798.78
38	40088.21	43758.23	109154.86	960301.66	964105.97	1003804.31
39	40114.86	43792.89	109168.76	960330.52	964140.36	1003809.84
40	40141.50	43827.56	109182.67	960359.36	964174.73	1003815.37
41	40168.14	43862.24	109196.59	960388.17	964209.08	1003820.91
42	40194.78	43896.93	109210.53	960416.96	964243.42	1003826.45
43	40221.41	43931.63	109224.48	960445.73	964277.73	1003832.00
44	40248.04	43966.34	109238.45	960474.48	964312.03	1003837.55
45	40274.67	44001.06	109252.43	960503.20	964346.31	1003843.11
46	40301.29	44035.78	109266.42	960531.90	964380.57	1003848.67
47	40327.91	44070.51	109280.42	960560.57	964414.81	1003854.24
48	40354.53	44105.25	109294.44	960589.23	964449.03	1003859.80
49	40381.14	44140.00	109308.47	960617.86	964483.24	1003865.38
50	40407.75	44174.76	109322.51	960646.47	964517.43	1003870.96
51	40434.36	44209.53	109336.56	960675.06	964551.60	1003876.54
52	40460.96	44244.31	109350.63	960703.62	964585.75	1003882.13
53	40487.56	44279.10	109364.71	960732.16	964619.88	1003887.72
54	40514.16	44313.90	109378.80	960760.68	964653.00	1003893.32
55	40540.75	44348.71	109392.91	960789.18	964688.10	1003898.92
56	40567.34	44383.53	109407.03	960817.65	964722.17	1003904.52
57	40593.93	44418.35	109421.16	960846.11	964756.24	1003910.13
58	40620.51	44453.18	109435.30	960874.54	964790.28	1003915.74
59	40647.09	44488.02	109449.46	960902.94	964824.31	1003921.36
60	40673.66	44522.87	109463.63	960931.33	964858.31	1003926.98

garish. cane	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
3597.39	60 92050.49	235585.24	255930.47	996402.61	1037214.81	1040812.20
3602.76	59 92039.12	235394.83	255755.21	996397.24	1037179.69	1040782.45
3608.13	58 92027.74	235204.69	255580.22	996391.87	1037144.60	1040752.71
3613.50	57 92016.35	235014.81	255405.48	996386.50	1037109.52	1040723.02
3618.88	56 92004.96	234825.19	255231.01	996381.12	1037074.47	1040693.34
3624.26	55 91993.56	234635.82	255056.80	996375.74	1037039.43	1040663.69
3629.64	54 91982.15	234446.72	254882.84	996370.36	1037004.42	1040634.06
3635.04	53 91970.73	234257.87	254709.15	996364.96	1036969.42	1040604.45
3640.43	52 91959.31	234069.28	254535.71	996359.57	1036934.44	1040574.87
3645.83	51 91947.88	233880.95	254362.53	996354.17	1036899.48	1040545.31
3651.23	50 91936.44	233692.87	254189.61	996348.77	1036864.55	1040515.78
3656.64	49 91924.99	233505.05	254016.94	996343.36	1036829.63	1040486.27
3662.05	48 91913.53	233317.48	253844.53	996337.95	1036794.73	1040456.78
3667.47	47 91902.07	233130.17	253672.38	996332.53	1036759.85	1040427.32
3672.89	46 91890.60	232943.11	253500.43	996327.11	1036724.99	1040397.88
3678.32	45 91879.12	232756.30	253328.83	996321.68	1036690.15	1040368.46
3683.75	44 91867.63	232569.75	253157.44	996316.25	1036655.32	1040339.07
3689.18	43 91856.14	232383.45	252986.30	996310.82	1036620.52	1040309.70
3694.62	42 91844.64	232197.40	252815.41	996305.38	1036585.74	1040280.35
3700.06	41 91833.13	232011.60	252644.78	996299.94	1036550.97	1040251.03
3705.51	40 91821.61	231826.06	252474.40	996294.49	1036516.22	1040221.76
3710.96	39 91810.08	231640.76	252304.26	996289.04	1036481.50	1040192.46
3716.42	38 91798.55	231455.71	252134.38	996283.58	1036446.79	1040163.21
3721.88	37 91787.01	231270.91	251964.75	996278.12	1036412.10	1040133.98
3727.34	36 91775.46	231086.36	251795.37	996272.66	1036377.43	1040104.77
3732.81	35 91763.90	230902.06	251626.24	996267.19	1036342.78	1040075.59
3738.28	34 91752.34	230718.01	251457.35	996261.72	1036308.15	1040046.43
3743.76	33 91740.77	230534.20	251288.71	996256.24	1036273.54	1040017.30
3749.24	32 91729.19	230350.64	251120.32	996250.76	1036238.94	1039988.19
3754.73	31 91717.60	230167.32	250952.18	996245.27	1036204.37	1039959.10
3760.22	30 91706.01	229984.25	250784.28	996239.78	1036169.81	1039930.03
3765.71	29 91694.41	229801.43	250616.63	996234.28	1036135.27	1039900.99
3771.22	28 91682.80	229618.85	250449.23	996228.78	1036100.75	1039871.97
3776.72	27 91671.18	229436.51	250282.07	996223.28	1036066.25	1039842.97
3782.23	26 91659.55	229254.42	250115.15	996217.77	1036031.77	1039813.97
3787.74	25 91647.91	229072.57	249948.47	996212.26	1035997.31	1039785.05
3793.26	24 91636.27	228890.96	249782.04	996206.74	1035962.86	1039756.12
3798.78	23 91624.62	228709.59	249615.86	996201.22	1035928.44	1039727.22
3804.31	22 91612.96	228528.46	249449.91	996195.69	1035894.03	1039698.34
3809.84	21 91601.30	228347.58	249284.21	996190.16	1035859.64	1039669.48
3815.37	20 91589.63	228166.93	249118.74	996184.63	1035825.27	1039640.64
3820.91	19 91577.95	227986.53	248953.52	996179.09	1035790.92	1039611.83
3826.45	18 91566.26	227806.36	248788.54	996173.55	1035756.58	1039583.04
3832.00	17 91554.56	227626.43	248623.80	996168.00	1035722.27	1039554.27
3837.55	16 91542.86	227446.74	248459.29	996162.45	1035687.97	1039525.52
3843.11	15 91531.15	227267.29	248295.03	996156.89	1035653.69	1039496.80
3848.67	14 91519.43	227088.07	248131.00	996151.33	1035619.41	1039468.10
3854.24	13 91507.70	226909.09	247967.21	996145.76	1035585.19	1039439.43
3859.80	12 91495.96	226730.35	247803.66	996140.20	1035550.97	1039410.77
3865.38	11 91484.22	226551.84	247640.34	996134.63	1035516.76	1039382.14
3870.96	10 91472.47	226373.57	247477.26	996129.04	1035482.57	1039353.53
3876.54	9 91460.71	226195.53	247314.42	996123.46	1035448.40	1039324.94
3882.13	8 91448.95	226017.73	247151.81	996117.87	1035414.25	1039296.38
3887.72	7 91437.18	225840.16	246989.43	996112.28	1035380.12	1039267.84
3893.32	6 91425.40	225662.83	246827.29	996106.68	1035346.00	1039239.32
3898.92	5 91413.61	225485.72	246665.38	996101.08	1035311.90	1039210.82
3904.52	4 91401.81	225308.85	246503.71	996095.48	1035277.83	1039182.35
3910.13	3 91390.08	225132.21	246342.27	996089.87	1035243.76	1039153.89
3915.74	2 91378.10	224955.80	246181.06	996084.26	1035209.72	1039125.46
3921.36	1 91366.37	224779.62	246020.08	996078.64	1035175.60	1039097.06
3926.98	0 91354.54	224603.68	245859.33	996073.02	1035141.69	1039068.67

24 1	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologariſh. pro Tangente	Tomologariſh. pro Secante
0	40673.66	44522.87	109465.63	960931.33	964858.31	1003926.98
1	40700.23	44557.73	109477.81	960959.69	964862.30	1003932.61
2	40726.80	44592.60	109492.01	960988.03	964926.28	1003938.24
3	40753.37	44627.48	109506.22	961016.35	964960.23	1003943.88
4	40779.93	44662.37	109520.44	961044.65	964994.17	1003949.52
5	40806.49	44697.27	109534.67	961072.93	965028.09	1003955.16
6	40833.05	44732.17	109548.92	961101.18	965061.99	1003960.81
7	40859.60	44767.08	109563.18	961129.41	965095.87	1003966.46
8	40886.15	44802.00	109577.46	961157.62	965129.74	1003972.12
9	40912.69	44836.93	109591.74	961185.80	965163.59	1003977.78
10	40939.23	44871.87	109606.04	961213.97	965197.42	1003983.45
11	40965.77	44906.82	109620.36	961242.11	965231.23	1003989.12
12	40992.30	44941.78	109634.68	961270.23	965265.03	1003994.80
13	41018.83	44976.75	109649.02	961298.33	965298.81	1004000.48
14	41045.36	45011.73	109663.37	961326.41	965332.57	1004006.16
15	41071.89	45046.72	109677.74	961354.46	965366.31	1004011.85
16	41098.41	45081.72	109692.12	961382.50	965400.04	1004017.54
17	41124.93	45116.73	109706.51	961410.51	965433.75	1004023.24
18	41151.44	45151.74	109720.91	961438.50	965467.44	1004028.94
19	41177.95	45186.76	109735.33	961466.47	965501.12	1004034.65
20	41204.46	45221.78	109749.76	961494.41	965534.77	1004040.36
21	41230.96	45256.83	109764.20	961522.34	965568.41	1004046.07
22	41257.46	45291.88	109778.66	961550.24	965602.04	1004051.79
23	41283.95	45326.94	109793.13	961578.12	965635.65	1004057.52
24	41310.44	45362.01	109807.61	961605.99	965669.25	1004063.25
25	41336.93	45397.09	109822.11	961633.82	965702.86	1004068.98
26	41363.42	45432.18	109836.62	961661.64	965736.36	1004074.72
27	41389.90	45467.28	109851.14	961689.44	965769.85	1004080.46
28	41416.38	45502.39	109865.68	961717.21	965803.41	1004086.20
29	41442.85	45537.51	109880.23	961744.96	965836.92	1004091.95
30	41469.32	45572.64	109894.79	961772.70	965870.41	1004097.71
31	41495.79	45607.77	109909.36	961800.41	965903.87	1004103.47
32	41522.26	45642.91	109923.95	961828.09	965937.32	1004109.23
33	41548.72	45678.06	109938.55	961855.76	965970.76	1004115.00
34	41575.18	45713.22	109953.17	961883.41	966004.18	1004120.77
35	41601.63	45748.39	109967.79	961911.03	966037.58	1004126.55
36	41628.08	45783.57	109982.43	961938.64	966070.97	1004132.33
37	41654.53	45818.76	109997.09	961966.22	966104.34	1004138.12
38	41680.97	45853.96	110011.76	961993.78	966137.69	1004143.91
39	41707.41	45889.17	110026.44	962021.32	966171.03	1004149.70
40	41733.85	45924.39	110041.13	962048.84	966204.34	1004155.50
41	41760.28	45959.62	110055.84	962076.34	966237.65	1004161.31
42	41786.71	45994.86	110070.56	962103.82	966270.93	1004167.12
43	41813.13	46030.11	110085.26	962131.27	966304.20	1004172.93
44	41839.55	46065.37	110100.04	962158.71	966337.45	1004178.75
45	41865.97	46100.64	110114.80	962186.12	966370.69	1004184.57
46	41892.39	46135.91	110129.57	962213.51	966403.91	1004190.39
47	41918.80	46171.19	110144.36	962240.88	966437.11	1004196.22
48	41945.21	46206.48	110159.16	962268.24	966470.30	1004202.06
49	41971.61	46241.78	110173.97	962295.57	966503.46	1004207.90
50	41998.01	46277.09	110188.79	962322.87	966536.62	1004213.74
51	42024.41	46312.42	110203.63	962350.16	966569.75	1004219.59
52	42050.80	46347.76	110218.49	962377.43	966602.88	1004225.44
53	42077.19	46383.11	110233.35	962404.68	966635.98	1004231.30
54	42103.58	46418.46	110248.23	962431.90	966669.07	1004237.16
55	42129.96	46453.82	110263.13	962459.11	966702.14	1004243.03
56	42156.34	46489.19	110278.03	962486.29	966735.19	1004248.90
57	42182.72	46524.57	110292.95	962513.46	966768.23	1004254.78
58	42209.09	46559.96	110307.89	962540.60	966801.26	1004260.66
59	42235.46	46595.36	110322.83	962567.72	966834.28	1004266.54
60	42261.83	46630.77	110337.79	962594.83	966867.25	1004272.43

3926.98
3932.61
3938.24
3943.88
3949.52
3955.16
3960.81
3966.46
3972.12
3977.78
3983.45
3989.12
3994.80
4000.48
4006.16
4011.85
4017.54
4023.24
4028.94
4034.65
4040.36
4046.07
4051.79
4057.52
4063.25
4068.98
4074.72
4080.46
4086.20
4091.95
4097.71
4103.47
4109.23
4115.00
4120.77
4126.55
4132.33
4138.12
4143.91
4149.70
4155.50
4161.31
4167.12
4172.93
4178.75
4184.57
4190.39
4196.22
4202.06
4207.90
4213.74
4219.59
4225.44
4231.30
4237.16
4243.03
4248.90
4254.78
4260.66
4266.54
4272.43

SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Me/ologarith. pro Tangente	Tomologari.b. pro Secante
60	91354.54	224603.68	245859.33	996073.02	1035141.69
59	91342.71	224427.96	245698.82	996067.39	1035107.70
58	91330.87	224252.47	245538.53	996061.76	1035073.72
57	91319.02	224077.21	245378.48	996056.12	1035039.77
56	91307.16	223902.13	245218.65	996050.48	1035005.83
55	91295.29	223727.38	245059.05	996044.84	1034971.91
54	91283.42	223552.80	244899.68	996039.19	1034938.01
53	91271.54	223378.45	244740.54	996033.54	1034904.13
52	91259.65	223204.33	244581.63	996027.88	1034870.26
51	91247.75	223030.43	244422.94	996022.22	1034836.41
50	91235.84	222856.76	244264.48	996016.55	1034802.58
49	91223.92	222683.31	244106.24	996010.88	1034768.77
48	91212.01	222510.09	243948.23	996005.20	1034734.97
47	91200.08	222337.09	243790.45	995999.52	1034701.19
46	91188.14	222164.32	243632.89	995993.84	1034667.43
45	91176.20	221991.77	243475.55	995988.15	1034633.69
44	91164.25	221819.44	243318.44	995982.46	1034599.96
43	91152.29	221647.33	243161.55	995976.76	1034566.25
42	91140.32	221475.45	243004.89	995971.06	1034532.56
41	91128.35	221303.79	242848.44	995965.35	1034498.88
40	91116.37	221132.34	242692.22	995959.64	1034465.23
39	91104.38	220961.12	242536.22	995953.93	1034431.59
38	91092.38	220790.12	242380.44	995948.21	1034397.96
37	91080.38	220619.34	242224.88	995942.48	1034364.36
36	91068.37	220448.78	242069.54	995936.75	1034330.77
35	91056.35	220278.43	241914.42	995931.02	1034297.20
34	91044.32	220108.31	241759.52	995925.28	1034263.64
33	91032.28	219938.40	241604.84	995919.54	1034230.11
32	91020.24	219768.71	241450.38	995913.80	1034196.59
31	91008.19	219599.23	241296.13	995908.05	1034163.08
30	90996.13	219429.97	241142.10	995902.29	1034129.60
29	90984.06	219260.93	240988.29	995896.53	1034096.13
28	90971.98	219092.10	240834.69	995890.77	1034062.67
27	90959.90	218923.49	240681.32	995885.00	1034029.24
26	90947.81	218755.15	240528.15	995879.23	1033995.82
25	90935.71	218586.91	240375.28	995873.45	1033962.42
24	90923.61	218418.94	240222.47	995867.67	1033929.03
23	90911.50	218251.19	240069.95	995861.88	1033895.66
22	90899.38	218083.64	239917.64	995856.09	1033862.31
21	90887.25	217916.31	239765.55	995850.30	1033828.97
20	90875.11	217749.20	239613.67	995844.50	1033795.66
19	90862.97	217582.29	239462.01	995838.69	1033762.35
18	90850.82	217415.59	239310.55	995832.88	1033729.07
17	90838.66	217249.11	239159.31	995827.07	1033695.80
16	90826.49	217082.83	239008.28	995821.25	1033662.55
15	90814.32	216916.77	238857.46	995815.43	1033629.31
14	90802.14	216750.91	238706.85	995809.61	1033596.09
13	90789.95	216585.27	238556.45	995803.78	1033562.89
12	90777.75	216419.83	238406.25	995797.94	1033529.70
11	90765.54	216254.60	238256.27	995792.10	1033496.54
10	90753.33	216089.58	238106.50	995786.26	1033463.38
9	90741.11	215924.76	237956.93	995780.41	1033430.25
8	90728.88	215760.15	237807.58	995774.56	1033397.12
7	90716.64	215595.75	237658.43	995768.70	1033364.02
6	90704.40	215431.56	237509.49	995762.84	1033330.93
5	90692.15	215267.57	237360.75	995756.97	1033297.86
4	90679.89	215103.78	237212.22	995751.10	1033264.81
3	90667.62	214940.20	237063.90	995745.22	1033231.77
2	90655.35	214776.83	236915.78	995739.34	1033198.74
1	90643.07	214613.66	236767.87	995733.46	1033165.74
0	90630.78	214450.69	236620.16	995727.57	1033132.75

25	SINVS.	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	42261.83	46630.77	110337.79	962594.83	966867.25	1004272.43
1	42288.19	46666.19	110352.77	962621.91	966900.23	1004278.32
2	42314.55	46701.62	110367.75	962648.67	966933.19	1004284.22
3	42340.90	46737.05	110382.75	962676.01	966966.13	1004290.12
4	42367.25	46772.51	110397.77	962703.03	966999.06	1004296.03
5	42393.60	46807.97	110412.79	962730.03	967031.97	1004301.94
6	42419.94	46843.43	110427.83	962757.01	967064.86	1004307.85
7	42446.28	46878.90	110442.89	962783.97	967097.74	1004313.77
8	42472.62	46914.38	110457.95	962810.90	967130.66	1004319.70
9	42498.95	46949.88	110473.03	962837.82	967163.45	1004325.63
10	42525.28	46985.39	110488.13	962864.72	967196.28	1004331.56
11	42551.61	47020.90	110503.24	962891.60	967229.10	1004337.50
12	42577.93	47056.43	110518.36	962918.45	967261.90	1004343.44
13	42604.25	47091.96	110533.49	962945.29	967294.68	1004349.39
14	42630.56	47127.51	110548.64	962972.11	967327.45	1004355.34
15	42656.87	47163.06	110563.80	962998.90	967360.20	1004361.30
16	42683.18	47198.63	110578.98	963025.68	967392.94	1004367.26
17	42709.49	47234.20	110594.17	963052.43	967425.66	1004373.22
18	42735.79	47269.78	110609.37	963079.17	967458.36	1004379.19
19	42762.09	47305.38	110624.58	963105.89	967491.05	1004385.17
20	42788.38	47340.98	110639.82	963132.58	967523.72	1004391.14
21	42814.67	47376.59	110655.06	963159.26	967556.38	1004397.13
22	42840.95	47412.22	110670.31	963185.91	967589.03	1004403.11
23	42867.23	47447.85	110685.58	963212.55	967621.65	1004409.11
24	42893.51	47483.49	110700.87	963239.16	967654.26	1004415.10
25	42919.79	47519.14	110716.16	963265.76	967686.84	1004421.10
26	42946.06	47554.81	110731.47	963292.33	967719.40	1004427.11
27	42972.33	47590.48	110746.80	963318.89	967752.01	1004433.12
28	42998.59	47626.16	110762.14	963345.42	967784.56	1004439.13
29	43024.85	47661.85	110777.49	963371.94	967817.09	1004445.15
30	43051.11	47697.55	110792.85	963398.44	967849.61	1004451.18
31	43077.36	47733.26	110808.23	963424.94	967882.11	1004457.20
32	43103.61	47768.99	110823.63	963451.37	967914.60	1004463.24
33	43129.86	47804.72	110839.03	963477.80	967947.08	1004469.27
34	43156.10	47840.46	110854.45	963504.22	967979.53	1004475.31
35	43182.34	47876.21	110869.89	963530.62	968011.98	1004481.36
36	43208.57	47911.97	110885.33	963556.99	968044.40	1004487.41
37	43234.80	47947.74	110900.79	963583.35	968076.82	1004493.47
38	43261.03	47983.52	110916.27	963609.69	968109.21	1004499.53
39	43287.26	48019.32	110931.76	963636.01	968141.60	1004505.59
40	43313.48	48055.12	110947.26	963662.31	968173.96	1004511.66
41	43339.70	48090.93	110962.77	963688.59	968206.32	1004517.72
42	43365.91	48126.75	110978.30	963714.84	968238.65	1004523.81
43	43392.12	48162.58	110993.85	963741.08	968270.98	1004529.89
44	43418.33	48198.42	111009.41	963767.31	968303.28	1004535.97
45	43444.53	48234.27	111024.98	963793.51	968335.57	1004542.08
46	43470.73	48270.14	111040.56	963819.63	968367.85	1004548.16
47	43496.92	48306.01	111056.16	963845.82	968400.12	1004554.26
48	43523.11	48341.89	111071.77	963871.99	968432.36	1004560.37
49	43549.30	48377.78	111087.40	963898.12	968464.59	1004566.48
50	43575.48	48413.68	111103.04	963924.22	968496.81	1004572.56
51	43601.66	48449.59	111118.69	963950.30	968529.01	1004578.71
52	43627.84	48485.52	111134.36	963976.37	968561.20	1004584.83
53	43654.01	48521.45	111150.04	964002.41	968593.38	1004590.96
54	43680.18	48557.39	111165.73	964028.44	968625.53	1004597.09
55	43706.34	48593.34	111181.44	964054.45	968657.68	1004603.23
56	43732.50	48629.31	111197.16	964080.44	968689.81	1004609.37
57	43758.66	48665.28	111212.90	964106.40	968721.92	1004615.52
58	43784.82	48701.26	111228.65	964132.35	968754.02	1004621.66
59	43810.97	48737.26	111244.42	964158.28	968786.11	1004627.82
60	43837.12	48773.26	111260.19	964184.20	968818.18	1004633.98

Logarithm. Secantie.		SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarithm. pro Tangente	Tomologarithm. pro Secantie
04272.43	60	90630.78	214450.69	235620.16	995727.57	1033132.75	1037405.17
04278.32	59	90618.48	214287.93	235472.65	995721.68	1033099.77	1037378.09
04284.22	58	90606.17	214125.37	235325.35	995715.78	1033066.81	1037351.03
04290.12	57	90593.86	213963.01	235178.26	995709.88	1033033.87	1037323.99
04296.03	56	90581.54	213800.85	235031.36	995703.97	1033000.94	1037296.97
04301.94	55	90569.21	213638.80	234884.67	995698.06	1032968.03	1037269.97
04307.85	54	90556.88	213477.14	234738.18	995692.15	1032935.14	1037242.99
04313.77	53	90544.54	213315.59	234591.89	995686.23	1032902.26	1037216.03
04319.70	52	90532.19	213154.23	234445.81	995680.30	1032869.40	1037189.10
04325.63	51	90519.83	212993.08	234299.92	995674.37	1032836.55	1037162.18
04331.56	50	90507.46	212832.13	234154.24	995668.44	1032803.72	1037135.23
04337.50	49	90495.09	212671.37	234008.75	995662.50	1032770.90	1037108.40
04343.44	48	90482.71	212510.82	233863.47	995656.56	1032738.10	1037081.55
04349.39	47	90470.32	212350.46	233718.38	995650.61	1032705.32	1037054.71
04355.34	46	90457.92	212190.30	233573.49	995644.66	1032672.55	1037027.89
04361.30	45	90445.51	212030.34	233428.80	995638.70	1032639.80	1037001.10
04367.26	44	90433.10	211870.57	233284.31	995632.74	1032607.06	1036974.32
04373.22	43	90420.68	211711.01	233140.02	995626.78	1032574.34	1036947.57
04379.19	42	90408.25	211551.64	232995.93	995620.81	1032541.64	1036920.83
04385.17	41	90395.82	211392.46	232852.03	995614.83	1032508.95	1036894.11
04391.14	40	90383.38	211233.48	232708.33	995608.86	1032476.28	1036867.42
04397.13	39	90370.93	211074.70	232564.82	995602.87	1032443.62	1036840.74
04403.11	38	90358.47	210916.11	232421.52	995596.89	1032410.97	1036814.09
04409.11	37	90346.00	210757.71	232278.40	995590.89	1032378.35	1036787.45
04415.10	36	90333.53	210599.51	232135.48	995584.90	1032345.74	1036760.84
04421.10	35	90321.05	210441.50	232002.76	995578.90	1032313.14	1036734.24
04427.11	34	90308.56	210283.69	231850.23	995572.89	1032280.56	1036707.67
04433.12	33	90296.06	210126.07	231707.98	995566.88	1032247.99	1036681.11
04439.13	32	90283.56	209968.64	231565.75	995560.87	1032215.44	1036654.58
04445.15	31	90271.05	209811.40	231423.81	995554.85	1032182.91	1036628.06
04451.18	30	90258.53	209654.36	231282.05	995548.82	1032150.39	1036601.56
04457.20	29	90246.00	209497.51	231140.49	995542.80	1032117.89	1036575.09
04463.24	28	90233.47	209340.84	231000.11	995536.75	1032085.40	1036548.63
04469.27	27	90220.93	209184.37	230859.94	995530.73	1032052.92	1036522.20
04475.31	26	90208.38	209028.09	230719.95	995524.69	1032020.47	1036495.78
04481.36	25	90195.82	208872.00	230579.15	995518.64	1031988.02	1036469.38
04487.41	24	90183.25	208716.10	230438.54	995512.59	1031955.60	1036443.01
04493.47	23	90170.68	208560.39	230298.13	995506.53	1031923.18	1036416.65
04499.53	22	90158.10	208404.86	230157.90	995500.47	1031890.79	1036390.31
04505.59	21	90145.51	208249.53	230017.86	995494.41	1031858.40	1036363.99
04511.66	20	90132.91	208094.38	229877.01	995488.34	1031826.04	1036337.69
04517.72	19	90120.31	207939.42	229736.35	995482.27	1031793.68	1036311.41
04523.81	18	90107.70	207784.65	229595.88	995476.19	1031761.35	1036285.16
04529.89	17	90095.08	207630.07	229455.60	995470.11	1031729.02	1036258.92
04535.98	16	90082.45	207475.67	229315.51	995464.02	1031696.72	1036232.69
04542.07	15	90069.82	207321.46	229175.60	995457.93	1031664.43	1036206.49
04548.16	14	90057.18	207167.43	229035.84	995451.84	1031632.15	1036180.31
04554.26	13	90044.53	207013.50	228896.14	995445.74	1031599.89	1036154.15
04560.37	12	90031.87	206859.93	228756.60	995439.63	1031567.64	1036128.01
04566.48	11	90019.21	206706.46	228617.23	995433.52	1031535.41	1036101.88
04572.50	10	90006.54	206553.18	228478.05	995427.41	1031503.19	1036075.78
04578.51	9	89993.86	206400.08	228339.00	995421.29	1031470.99	1036049.70
04584.53	8	89981.17	206247.16	228200.11	995415.17	1031438.80	1036023.63
04590.56	7	89968.48	206094.42	228061.34	995409.04	1031406.62	1035997.59
04597.59	6	89955.78	205941.87	227922.79	995402.91	1031374.47	1035971.56
04603.63	5	89943.07	205789.50	227784.44	995396.77	1031342.32	1035945.55
04609.67	4	89930.35	205637.32	227646.26	995390.63	1031310.19	1035919.56
04615.71	3	89917.62	205485.31	227508.25	995384.48	1031278.08	1035893.60
04621.76	2	89904.89	205333.40	227370.41	995378.33	1031245.98	1035867.65
04627.82	1	89892.15	205181.84	227232.74	995372.18	1031213.89	1035841.72
04633.98	0	89879.40	205030.38	227095.20	995366.02	1031181.82	1035815.80

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26	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	43837.12	48773.26	111260.19	964184.20	968818.18	1004633.98
1	43863.26	48809.27	111275.98	964210.09	968850.23	1004640.15
2	43889.40	48845.30	111291.79	964235.96	968882.27	1004646.31
3	43915.53	48881.33	111307.61	964261.82	968914.30	1004652.49
4	43941.66	48917.37	111323.45	964287.65	968946.31	1004658.66
5	43967.79	48953.43	111339.30	964313.47	968978.31	1004664.85
6	43993.92	48989.49	111355.16	964339.26	969010.30	1004671.03
7	44020.04	49025.57	111371.03	964365.04	969042.26	1004677.22
8	44046.16	49061.66	111386.92	964390.80	969074.22	1004683.42
9	44072.27	49097.75	111402.82	964416.54	969106.16	1004689.62
10	44098.38	49133.86	111418.74	964442.26	969138.09	1004695.82
11	44124.48	49169.97	111434.67	964467.96	969170.00	1004702.03
12	44150.58	49206.10	111450.62	964493.65	969201.89	1004708.25
13	44176.68	49242.24	111466.58	964519.31	969233.78	1004714.47
14	44202.78	49278.38	111482.55	964544.96	969265.65	1004720.69
15	44228.87	49314.54	111498.54	964570.58	969297.50	1004726.92
16	44254.96	49350.71	111514.54	964596.19	969329.34	1004733.15
17	44281.04	49386.89	111530.56	964621.78	969361.17	1004739.39
18	44307.12	49423.08	111546.59	964647.35	969392.98	1004745.63
19	44333.20	49459.28	111562.63	964672.90	969424.78	1004751.87
20	44359.27	49495.49	111578.69	964698.44	969456.56	1004758.12
21	44385.34	49531.71	111594.76	964723.95	969488.33	1004764.38
22	44411.40	49567.94	111610.84	964749.45	969520.09	1004770.64
23	44437.45	49604.18	111626.94	964774.92	969551.83	1004776.90
24	44463.52	49640.43	111643.06	964800.38	969583.55	1004783.17
25	44489.57	49676.69	111659.19	964825.82	969615.27	1004789.45
26	44515.62	49712.97	111675.33	964851.24	969646.97	1004795.72
27	44541.67	49749.25	111691.49	964876.65	969678.65	1004802.01
28	44567.71	49785.54	111707.66	964902.03	969710.32	1004808.29
29	44593.75	49821.85	111723.84	964927.40	969741.98	1004814.59
30	44619.78	49858.16	111740.04	964952.74	969773.63	1004820.88
31	44645.81	49894.49	111756.25	964978.07	969805.26	1004827.18
32	44671.84	49930.82	111772.48	965003.38	969836.87	1004833.49
33	44697.86	49967.17	111788.72	965028.68	969868.47	1004839.80
34	44723.88	50003.52	111804.98	965053.95	969900.06	1004846.11
35	44749.90	50039.89	111821.25	965079.20	969931.64	1004852.43
36	44775.91	50076.27	111837.53	965104.44	969963.20	1004858.76
37	44801.92	50112.66	111853.83	965129.66	969994.74	1004865.08
38	44827.92	50149.06	111870.14	965154.85	970026.28	1004871.42
39	44853.92	50185.47	111886.47	965180.04	970057.82	1004877.76
40	44879.92	50221.89	111902.81	965205.21	970089.30	1004884.10
41	44905.91	50258.32	111919.16	965230.35	970120.80	1004890.44
42	44931.90	50294.76	111935.53	965255.48	970152.27	1004896.80
43	44957.89	50331.21	111951.91	965280.59	970183.74	1004903.15
44	44983.87	50367.67	111968.31	965305.68	970215.19	1004909.51
45	45009.85	50404.15	111984.72	965330.75	970246.63	1004915.88
46	45035.82	50440.63	112001.15	965355.81	970278.05	1004922.25
47	45061.79	50477.13	112017.59	965380.84	970309.46	1004928.62
48	45087.76	50513.63	112034.05	965405.86	970340.86	1004935.00
49	45113.72	50550.15	112050.52	965430.86	970372.25	1004941.39
50	45139.68	50586.68	112067.00	965455.84	970403.62	1004947.77
51	45165.63	50623.22	112083.50	965480.81	970434.97	1004954.17
52	45191.58	50659.77	112100.01	965505.75	970466.32	1004960.56
53	45217.53	50696.33	112116.53	965530.68	970497.65	1004966.97
54	45243.47	50732.90	112133.07	965555.59	970528.97	1004973.37
55	45269.41	50769.48	112149.63	965580.48	970560.27	1004979.78
56	45295.35	50806.07	112166.20	965605.36	970591.56	1004986.20
57	45321.28	50842.67	112182.78	965630.21	970622.84	1004992.62
58	45347.21	50879.28	112199.38	965655.05	970654.10	1004999.05
59	45373.13	50915.91	112216.00	965679.87	970685.35	1005005.48
60	45399.05	50952.54	112232.62	965704.68	970716.59	1005011.91

Logarithm.
Secantæ

004633.98
004640.15
004646.31
004652.49
004658.66
004664.85
004671.03
004677.22
004683.42
004689.62
004695.82
004702.03
004708.25
004714.47
004720.69
004726.92
004733.15
004739.39
004745.63
004751.87
004758.12
004764.38
004770.64
004776.90
004783.17
004789.45
004795.72
004802.01
004808.29
004814.59
004820.88
004827.18
004833.49
004839.80
004846.11
004852.43
004858.76
004865.08
004871.42
004877.76
004884.10
004890.44
004896.80
004903.15
004909.51
004915.88
004922.25
004928.62
004935.00
004941.39
004947.77
004954.17
004960.56
004966.97
004973.37
004979.78
004986.20
004992.62
004999.05
005005.48
005011.91

SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologarith. pro Tangente	Tomologarith. pro Secantæ
60	89879.40	205030.38	228117.20	995366.02	1031181.82
59	89866.65	204879.10	227981.24	995359.85	1031149.77
58	89853.89	204728.00	227845.46	995353.69	1031117.73
57	89841.12	204577.08	227709.86	995347.51	1031085.70
56	89828.34	204426.34	227574.45	995341.34	1031053.69
55	89815.55	204275.73	227439.21	995335.15	1031021.69
54	89802.76	204125.40	227304.15	995328.97	1030989.70
53	89789.96	203975.19	227169.27	995322.78	1030957.74
52	89777.15	203825.17	227034.57	995316.58	1030925.78
51	89764.33	203675.32	226900.05	995310.38	1030893.84
50	89751.51	203525.65	226765.72	995304.18	1030861.91
49	89738.68	203376.15	226631.55	995297.97	1030830.00
48	89725.84	203226.83	226497.56	995291.75	1030798.11
47	89712.99	203077.69	226363.75	995285.53	1030766.22
46	89700.13	202928.73	226230.22	995279.31	1030734.35
45	89687.27	202779.94	226096.67	995273.08	1030702.50
44	89674.40	202631.33	225963.39	995266.85	1030670.66
43	89661.52	202482.89	225830.29	995260.61	1030638.83
42	89648.64	202334.62	225697.36	995254.37	1030607.02
41	89635.75	202186.53	225564.61	995248.13	1030575.22
40	89622.85	202038.62	225432.04	995241.88	1030543.44
39	89609.94	201890.88	225299.64	995235.62	1030511.67
38	89597.03	201743.31	225167.41	995229.36	1030479.91
37	89584.11	201595.91	225035.36	995223.10	1030448.17
36	89571.18	201448.69	224903.48	995216.83	1030416.45
35	89558.24	201301.64	224771.78	995210.55	1030384.73
34	89545.29	201154.77	224640.24	995204.28	1030353.03
33	89532.34	201008.06	224508.89	995197.99	1030321.35
32	89519.38	200861.53	224377.70	995191.71	1030289.68
31	89506.41	200715.16	224246.69	995185.41	1030258.02
30	89493.43	200568.97	224115.84	995179.12	1030226.37
29	89480.45	200422.95	223985.17	995172.82	1030194.74
28	89467.46	200277.10	223854.67	995166.51	1030163.13
27	89454.46	200131.42	223724.35	995160.20	1030131.53
26	89441.45	199985.90	223594.19	995153.89	1030099.94
25	89428.44	199840.56	223464.20	995147.57	1030068.36
24	89415.42	199695.39	223334.38	995141.24	1030036.80
23	89402.39	199550.38	223204.74	995134.92	1030005.26
22	89389.36	199405.54	223075.26	995128.58	1029973.72
21	89376.32	199260.87	222945.95	995122.24	1029942.20
20	89363.27	199116.37	222816.81	995115.90	1029910.70
19	89350.21	198972.04	222687.83	995109.56	1029879.20
18	89337.14	198827.87	222559.03	995103.20	1029847.73
17	89324.05	198683.87	222430.39	995096.85	1029816.26
16	89310.98	198540.03	222301.92	995090.49	1029784.81
15	89297.89	198396.36	222173.62	995084.12	1029753.37
14	89284.79	198252.86	222045.48	995077.75	1029721.95
13	89271.63	198109.55	221917.51	995071.38	1029690.54
12	89258.58	197966.32	221789.71	995065.00	1029659.14
11	89245.46	197823.34	221662.07	995058.61	1029627.75
10	89232.33	197680.50	221534.60	995052.23	1029596.38
9	89219.20	197537.82	221407.30	995045.85	1029565.03
8	89206.06	197395.31	221280.16	995039.44	1029533.68
7	89192.91	197252.96	221153.18	995033.03	1029502.35
6	89179.75	197110.77	221026.37	995026.63	1029471.03
5	89166.59	196968.74	220899.72	995020.22	1029439.73
4	89153.42	196826.88	220773.23	995013.80	1029408.44
3	89140.24	196685.18	220646.91	995007.38	1029377.16
2	89127.05	196543.64	220520.75	995000.95	1029345.90
1	89113.85	196402.27	220394.76	994994.52	1029314.65
0	89100.65	196261.05	220268.93	994988.09	1029283.41

27	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mejologarith. pro Tangente	Tomologarith. pro Secante
0	45399.05	50952.54	112232.62	965704.68	970716.59	1005011.91
1	45424.97	50989.19	112249.26	965729.46	970747.81	1005018.35
2	45450.88	51025.85	112265.92	965754.23	970779.02	1005024.70
3	45476.79	51062.52	112282.59	965779.08	970810.22	1005031.24
4	45502.69	51099.19	112299.28	965803.71	970841.41	1005037.70
5	45528.59	51135.88	112315.98	965828.42	970872.58	1005044.15
6	45554.49	51172.59	112332.69	965853.12	970903.74	1005050.62
7	45580.38	51209.30	112349.42	965877.80	970934.88	1005057.08
8	45606.27	51246.02	112366.16	965902.46	970966.01	1005063.55
9	45632.16	51282.75	112382.92	965927.10	970997.13	1005070.03
10	45658.04	51319.50	112399.69	965951.73	971028.24	1005076.51
11	45683.92	51356.25	112416.48	965976.34	971059.33	1005083.00
12	45709.79	51393.02	112433.28	966000.93	971090.41	1005089.49
13	45735.66	51429.80	112450.10	966025.50	971121.48	1005095.98
14	45761.53	51466.58	112466.93	966050.05	971152.54	1005102.48
15	45787.39	51503.38	112483.77	966074.59	971183.58	1005108.99
16	45813.25	51540.19	112500.63	966099.11	971214.61	1005115.50
17	45839.10	51577.02	112517.50	966123.61	971245.62	1005122.01
18	45864.95	51613.85	112534.39	966148.10	971276.62	1005128.53
19	45890.80	51650.69	112551.29	966172.57	971307.61	1005135.05
20	45916.64	51687.55	112568.21	966197.02	971338.59	1005141.58
21	45942.48	51724.41	112585.14	966221.45	971369.56	1005148.11
22	45968.32	51761.28	112602.08	966245.86	971400.51	1005154.64
23	45994.15	51798.18	112619.05	966270.26	971431.45	1005161.17
24	46019.98	51835.08	112636.03	966294.64	971462.37	1005167.73
25	46045.80	51871.99	112653.02	966319.00	971493.28	1005174.28
26	46071.62	51908.91	112670.07	966343.35	971524.16	1005180.84
27	46097.44	51945.82	112687.08	966367.68	971555.03	1005187.40
28	46123.25	51982.78	112704.08	966391.99	971585.89	1005193.96
29	46149.06	52019.73	112721.11	966416.28	971616.82	1005200.53
30	46174.87	52056.70	112738.16	966440.56	971647.73	1005207.11
31	46200.66	52093.68	112755.27	966464.82	971678.61	1005213.69
32	46226.46	52130.67	112772.37	966489.06	971709.53	1005220.27
33	46252.25	52167.67	112789.44	966513.25	971740.44	1005226.86
34	46278.04	52204.68	112806.60	966537.49	971771.34	1005233.45
35	46303.82	52241.70	112823.74	966561.68	971802.23	1005240.05
36	46329.60	52278.74	112840.88	966585.86	971833.11	1005246.65
37	46355.38	52315.78	112858.06	966610.01	971864.02	1005253.26
38	46381.15	52352.84	112875.24	966634.15	971894.92	1005259.87
39	46406.92	52389.90	112892.44	966658.28	971925.79	1005266.48
40	46432.69	52426.98	112909.65	966682.38	971956.69	1005273.11
41	46458.45	52464.07	112926.88	966706.47	971987.60	1005279.73
42	46484.21	52501.17	112944.12	966730.54	972018.50	1005286.36
43	46509.96	52538.29	112961.37	966754.59	972049.39	1005293.00
44	46535.71	52575.43	112978.64	966778.63	972080.27	1005299.64
45	46561.45	52612.54	112995.93	966802.65	972111.14	1005306.28
46	46587.19	52649.60	113013.23	966826.65	972142.03	1005312.93
47	46612.93	52686.85	113030.55	966850.64	972172.92	1005319.58
48	46638.66	52724.02	113047.88	966874.61	972203.80	1005326.24
49	46664.39	52761.20	113065.22	966898.56	972234.67	1005332.90
50	46690.12	52798.39	113082.58	966922.50	972265.54	1005339.57
51	46715.84	52835.56	113099.96	966946.42	972296.42	1005346.24
52	46741.56	52872.81	113117.35	966970.32	972327.29	1005352.92
53	46767.27	52910.04	113134.75	966994.20	972358.16	1005359.60
54	46792.98	52947.27	113152.17	967018.07	972389.03	1005366.29
55	46818.69	52984.52	113169.61	967041.92	972419.90	1005372.98
56	46844.39	53021.78	113187.06	967065.76	972450.76	1005379.68
57	46870.09	53059.06	113204.52	967089.58	972481.61	1005386.38
58	46895.78	53096.34	113222.00	967113.38	972512.46	1005393.08
59	46921.47	53133.64	113239.50	967137.16	972543.31	1005399.79
60	46947.16	53170.94	113257.01	967160.93	972574.14	1005406.51

logarith.
secante

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05115.50
05122.01
05128.53
05135.05
05141.58
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05161.11
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05174.28
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05193.96
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05220.27
05226.86
05233.45
05240.05
05246.65
05253.26
05259.87
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05273.11
05279.73
05286.36
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05299.64
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05319.58
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05386.38
05393.08
05399.79
05406.51

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologari:b. pro Tangente	Tomologari:b. pro Secante
60	89100.65	196261.05	220268.93	994988.09	1029283.41	1034295.32
59	89087.44	196120.00	220143.26	994981.65	1029252.19	1034270.54
58	89074.22	195979.10	220017.75	994975.21	1029220.98	1034245.77
57	89061.00	195838.37	219892.40	994968.76	1029189.78	1034221.02
56	89047.77	195697.89	219767.21	994962.37	1029158.59	1034196.29
55	89034.54	195557.39	219642.10	994955.85	1029127.42	1034171.58
54	89021.28	195417.13	219517.33	994949.38	1029096.26	1034146.88
53	89008.02	195277.04	219392.62	994942.82	1029065.12	1034122.20
52	88994.76	195137.11	219268.08	994936.45	1029033.99	1034097.54
51	88981.49	194997.33	219143.70	994929.97	1029002.87	1034072.90
50	88968.21	194857.71	219019.47	994923.49	1028971.76	1034048.27
49	88954.93	194718.26	218895.41	994917.00	1028940.67	1034023.67
48	88941.64	194578.96	218771.50	994910.51	1028909.59	1033999.07
47	88928.34	194439.81	218647.75	994904.02	1028878.52	1033974.50
46	88915.03	194300.83	218524.17	994897.52	1028847.46	1033949.95
45	88901.71	194162.00	218400.74	994891.01	1028816.42	1033925.41
44	88888.39	194023.33	218277.46	994884.50	1028785.39	1033900.89
43	88875.06	193884.81	218154.35	994877.99	1028754.38	1033876.39
42	88861.72	193746.45	218031.39	994871.47	1028723.38	1033851.90
41	88848.37	193608.25	217908.59	994864.95	1028692.39	1033827.43
40	88835.02	193470.20	217785.04	994858.42	1028661.41	1033802.98
39	88821.66	193332.34	217663.46	994851.89	1028630.44	1033778.55
38	88808.29	193194.57	217541.12	994845.35	1028599.49	1033754.14
37	88794.92	193056.98	217418.95	994838.81	1028568.55	1033729.74
36	88781.54	192919.56	217296.93	994832.27	1028537.63	1033705.36
35	88768.15	192782.28	217175.06	994825.72	1028506.71	1033681.00
34	88754.75	192645.16	217053.35	994819.16	1028475.81	1033656.65
33	88741.34	192508.19	216931.80	994812.60	1028444.92	1033632.32
32	88727.93	192371.38	216810.40	994806.04	1028414.05	1033608.01
31	88714.53	192234.72	216689.15	994799.47	1028383.18	1033583.72
30	88701.08	192098.21	216568.06	994792.89	1028352.33	1033559.44
29	88687.64	191961.86	216447.12	994786.31	1028321.49	1033535.18
28	88674.20	191825.65	216326.33	994779.73	1028290.67	1033510.94
27	88660.75	191689.60	216205.70	994773.14	1028259.86	1033486.71
26	88647.29	191553.70	216085.22	994766.55	1028229.06	1033462.51
25	88633.83	191417.95	215964.89	994759.95	1028198.27	1033438.32
24	88620.36	191282.36	215844.71	994753.35	1028167.49	1033414.14
23	88606.88	191146.91	215724.69	994746.74	1028136.73	1033390.99
22	88593.39	191011.62	215604.82	994740.13	1028105.98	1033367.85
21	88579.89	190876.47	215485.10	994733.52	1028075.24	1033344.72
20	88566.39	190741.47	215365.53	994726.89	1028044.51	1033321.62
19	88552.88	190606.63	215246.11	994720.27	1028013.80	1033298.53
18	88539.36	190471.93	215126.84	994713.64	1027983.10	1033275.46
17	88525.83	190337.38	215007.72	994707.00	1027952.41	1033252.41
16	88512.30	190202.99	214888.75	994700.36	1027921.73	1033229.37
15	88498.70	190068.74	214769.93	994693.72	1027891.07	1033206.35
14	88485.21	189934.64	214651.27	994687.07	1027860.42	1033183.35
13	88471.66	189800.68	214532.75	994680.42	1027829.78	1033160.36
12	88458.10	189666.88	214414.37	994673.76	1027799.15	1033137.39
11	88444.53	189533.21	214296.15	994667.10	1027768.53	1033114.44
10	88430.95	189400.71	214178.08	994660.43	1027737.93	1033091.50
9	88417.30	189268.34	214060.15	994653.76	1027707.34	1033068.58
8	88403.77	189136.13	213942.38	994647.08	1027676.76	1033045.68
7	88390.17	189004.06	213824.75	994640.40	1027646.19	1033022.80
6	88376.56	188872.15	213707.26	994633.71	1027615.64	1032999.93
5	88362.94	188740.36	213589.93	994627.02	1027585.10	1032977.08
4	88349.32	188608.72	213472.74	994620.32	1027554.57	1032954.24
3	88335.69	188477.24	213355.70	994613.62	1027524.05	1032931.42
2	88322.05	188346.90	213238.80	994606.91	1027493.54	1032908.62
1	88308.41	188216.70	213122.05	994600.21	1027463.05	1032885.84
0	88294.76	188086.65	213005.45	994593.49	1027432.56	1032863.07

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
0	46947.16	53170.94	113357.01	967160.93	971567.44	1005406.51
1	46972.84	53208.26	113374.53	967184.68	971597.91	1005413.23
2	46998.52	53245.59	113392.07	967208.41	971628.37	1005419.95
3	47024.19	53282.93	113409.62	967232.13	971658.81	1005426.68
4	47049.86	53320.29	113427.19	967255.83	971689.25	1005433.41
5	47075.53	53357.65	113444.78	967279.52	971719.67	1005440.15
6	47101.19	53395.03	113462.38	967303.19	971750.08	1005446.90
7	47126.85	53432.42	113479.99	967326.84	971780.48	1005453.64
8	47152.50	53469.82	113497.62	967350.47	971810.87	1005460.40
9	47178.15	53507.23	113515.27	967374.09	971841.24	1005467.15
10	47203.80	53544.65	113532.93	967397.69	971871.61	1005473.91
11	47229.44	53582.08	113550.60	967421.28	971901.96	1005480.68
12	47255.08	53619.53	113568.29	967444.85	971932.30	1005487.45
13	47280.71	53656.99	113586.00	967468.40	971962.63	1005494.23
14	47306.34	53694.46	113603.72	967491.94	971992.95	1005501.01
15	47331.97	53731.94	113621.46	967515.46	972023.25	1005507.80
16	47357.59	53769.43	113639.21	967538.96	972053.54	1005514.59
17	47383.21	53806.94	113656.98	967562.45	972083.83	1005521.38
18	47408.82	53844.45	113674.76	967585.92	972114.10	1005528.18
19	47434.43	53881.98	113692.55	967609.37	972144.36	1005534.99
20	47460.04	53919.52	113710.36	967632.81	972174.60	1005541.79
21	47485.64	53957.07	113728.19	967656.23	972204.84	1005548.61
22	47511.24	53994.64	113746.03	967679.63	972235.06	1005555.43
23	47536.83	54032.21	113763.89	967703.02	972265.27	1005562.25
24	47562.42	54069.80	113781.76	967726.40	972295.47	1005569.08
25	47588.01	54107.40	113799.65	967749.75	972325.66	1005575.91
26	47613.59	54145.01	113817.55	967773.09	972355.84	1005582.75
27	47639.17	54182.63	113835.47	967796.42	972386.01	1005589.59
28	47664.74	54220.27	113853.40	967819.72	972416.16	1005596.44
29	47690.31	54257.91	113871.35	967843.01	972446.31	1005603.29
30	47715.88	54295.57	113889.32	967866.29	972476.44	1005610.15
31	47741.44	54333.24	113907.30	967889.55	972506.56	1005617.01
32	47767.00	54370.92	113925.29	967912.79	972536.67	1005623.88
33	47792.55	54408.62	113943.30	967936.02	972566.77	1005630.75
34	47818.10	54446.32	113961.33	967959.23	972596.85	1005637.62
35	47843.64	54484.04	113979.37	967982.43	972626.93	1005644.51
36	47869.18	54521.77	113997.43	968005.60	972656.99	1005651.39
37	47894.72	54559.51	114015.50	968028.77	972687.05	1005658.28
38	47920.26	54597.26	114033.59	968051.91	972717.00	1005665.18
39	47945.79	54635.03	114051.69	968075.04	972747.12	1005672.08
40	47971.31	54672.81	114069.81	968098.16	972777.14	1005678.98
41	47996.83	54710.60	114087.94	968121.26	972807.15	1005685.89
42	48022.35	54748.40	114106.09	968144.34	972837.14	1005692.80
43	48047.86	54786.21	114124.25	968167.41	972867.13	1005699.72
44	48073.37	54824.04	114142.43	968190.46	972897.10	1005706.65
45	48098.88	54861.88	114160.62	968213.49	972927.07	1005713.57
46	48124.38	54899.73	114178.83	968236.51	972957.02	1005720.51
47	48149.88	54937.59	114197.06	968259.52	972986.96	1005727.45
48	48175.37	54975.46	114215.30	968282.50	973016.89	1005734.39
49	48200.86	55013.35	114233.56	968305.48	973046.81	1005741.34
50	48226.34	55051.25	114251.83	968328.43	973076.72	1005748.29
51	48251.82	55089.16	114270.12	968351.37	973106.62	1005755.24
52	48277.30	55127.08	114288.42	968374.30	973136.50	1005762.17
53	48302.77	55165.02	114306.74	968397.20	973166.38	1005769.11
54	48328.24	55202.97	114325.07	968420.10	973196.24	1005776.14
55	48353.70	55240.93	114343.42	968442.97	973226.09	1005783.12
56	48379.16	55278.90	114361.79	968465.83	973255.94	1005790.10
57	48404.62	55316.88	114380.17	968488.68	973285.77	1005797.09
58	48430.07	55354.88	114398.57	968511.51	973315.59	1005804.08
59	48455.52	55392.88	114416.98	968534.32	973345.40	1005811.07
60	48480.96	55430.90	114435.41	968557.13	973375.20	1005818.07

logarith.
secante

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35797.09
35804.08
35811.07
35818.07

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologarith. pro Tangente	Tomologarith. pro Secante
60	88304.76	188072.65	213005.45	994593.49	1027432.56	1032839.07
59	88281.10	187040.74	212888.90	994586.77	1027402.09	1032815.32
58	88267.43	187808.08	212772.67	994580.05	1027371.63	1032791.59
57	88253.75	187677.36	212656.51	994573.32	1027341.10	1032767.87
56	88240.07	187545.88	212540.48	994566.59	1027310.75	1032744.17
55	88226.39	187414.55	212424.60	994559.85	1027280.33	1032720.48
54	88212.68	187283.36	212308.87	994553.10	1027249.02	1032696.81
53	88198.98	187152.31	212193.28	994546.36	1027218.52	1032673.16
52	88185.27	187021.41	212077.83	994539.60	1027188.13	1032649.53
51	88171.55	186890.64	211962.53	994532.85	1027157.76	1032625.91
50	88157.82	186760.03	211847.37	994526.09	1027127.39	1032602.31
49	88144.09	186629.55	211732.35	994519.32	1027097.04	1032578.72
48	88130.35	186499.21	211617.48	994512.55	1027066.70	1032555.15
47	88116.60	186369.02	211502.74	994505.77	1027036.37	1032531.60
46	88102.84	186238.96	211388.15	994498.99	1027006.05	1032508.06
45	88089.07	186109.05	211273.71	994492.20	1026975.75	1032484.54
44	88075.30	185979.28	211159.40	994485.41	1026945.46	1032461.04
43	88061.52	185849.65	211045.23	994478.62	1026915.17	1032437.56
42	88047.73	185720.15	210931.21	994471.82	1026884.90	1032414.08
41	88033.94	185590.80	210817.33	994465.01	1026854.64	1032390.63
40	88020.14	185461.59	210703.59	994458.21	1026824.40	1032367.19
39	88006.33	185332.52	210589.98	994451.39	1026794.16	1032343.77
38	87992.51	185203.58	210476.52	994444.57	1026763.94	1032320.37
37	87978.69	185074.79	210363.20	994437.75	1026733.73	1032296.98
36	87964.86	184946.13	210250.02	994430.93	1026703.53	1032273.60
35	87951.02	184817.61	210136.08	994424.09	1026673.34	1032250.25
34	87937.17	184689.23	210022.48	994417.25	1026643.16	1032226.91
33	87923.32	184560.99	209909.11	994410.41	1026612.99	1032203.58
32	87909.46	184432.89	209795.89	994403.56	1026582.84	1032180.28
31	87895.59	184304.92	209682.60	994396.71	1026552.69	1032156.99
30	87881.71	184177.09	209569.34	994389.85	1026522.56	1032133.71
29	87867.83	184049.39	209456.14	994382.99	1026492.44	1032110.45
28	87853.94	183921.84	209343.00	994376.12	1026462.33	1032087.21
27	87840.04	183794.42	209230.00	994369.25	1026432.23	1032063.98
26	87826.13	183667.13	209117.14	994362.38	1026402.15	1032040.77
25	87812.22	183539.99	209004.41	994355.49	1026372.07	1032017.57
24	87798.30	183412.97	208891.81	994348.61	1026341.91	1031994.40
23	87784.37	183286.10	208779.37	994341.72	1026311.75	1031971.23
22	87770.43	183159.36	208667.00	994334.82	1026281.62	1031948.09
21	87756.40	183032.75	208554.68	994327.92	1026251.50	1031924.96
20	87742.54	182906.28	208442.42	994321.02	1026221.40	1031901.84
19	87728.58	182779.94	208330.21	994314.11	1026191.31	1031878.74
18	87714.61	182653.74	208218.07	994307.20	1026161.23	1031855.66
17	87700.64	182527.67	208106.00	994300.28	1026131.17	1031832.59
16	87686.66	182401.73	208000.00	994293.35	1026101.12	1031809.54
15	87672.67	182275.93	207900.06	994286.43	1026071.09	1031786.51
14	87658.68	182150.26	207794.89	994279.49	1026041.08	1031763.49
13	87644.68	182024.73	207689.86	994272.55	1026011.04	1031740.48
12	87630.67	181899.32	207584.86	994265.61	1025981.01	1031717.50
11	87616.65	181774.05	207479.89	994258.66	1025951.00	1031694.52
10	87602.62	181648.92	207374.95	994251.71	1025921.00	1031671.57
9	87588.59	181523.91	207269.96	994244.76	1025891.00	1031648.63
8	87574.55	181399.04	207164.90	994237.79	1025861.00	1031625.70
7	87560.50	181274.30	207059.86	994230.83	1025831.00	1031602.80
6	87546.45	181149.69	206954.83	994223.86	1025801.00	1031579.90
5	87532.39	181025.21	206849.80	994216.88	1025771.00	1031557.03
4	87518.32	180900.86	206744.76	994209.91	1025741.00	1031534.17
3	87504.24	180776.64	206639.71	994202.91	1025711.00	1031511.32
2	87490.16	180652.56	206534.68	994195.92	1025681.00	1031488.49
1	87476.07	180528.60	206429.64	994188.93	1025651.00	1031465.68
0	87461.97	180404.78	206324.63	994181.93	1025621.00	1031442.88

29	SINVS	TANGENS.	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	48480.06	55430.90	114335.41	968557.12	974375.20	1005818.07
1	48506.40	55468.94	114353.85	968579.91	974404.99	1005825.08
2	48531.84	55506.98	114372.31	968602.67	974434.76	1005832.09
3	48557.27	55545.04	114390.78	968625.42	974464.53	1005839.10
4	48582.70	55583.11	114409.27	968648.16	974494.28	1005846.12
5	48608.12	55621.19	114427.78	968670.88	974524.03	1005853.15
6	48633.54	55659.29	114446.30	968693.59	974553.76	1005860.18
7	48658.95	55697.39	114464.84	968716.28	974583.49	1005867.21
8	48684.36	55735.51	114483.39	968738.95	974613.20	1005874.25
9	48709.77	55773.64	114501.96	968761.61	974642.90	1005881.29
10	48735.17	55811.79	114520.55	968784.25	974672.59	1005888.34
11	48760.57	55849.94	114539.15	968806.88	974702.27	1005895.39
12	48785.97	55888.11	114557.76	968829.49	974731.94	1005902.45
13	48811.36	55926.29	114576.39	968852.09	974761.60	1005909.52
14	48836.74	55964.48	114595.04	968874.67	974791.25	1005916.58
15	48862.12	56002.69	114613.70	968897.23	974820.89	1005923.66
16	48887.50	56040.91	114632.38	968919.78	974850.52	1005930.73
17	48912.87	56079.14	114651.08	968942.32	974880.13	1005937.81
18	48938.24	56117.38	114669.79	968964.84	974909.74	1005944.90
19	48963.61	56155.64	114688.52	968987.34	974939.34	1005951.99
20	48988.97	56193.91	114707.26	969009.83	974968.92	1005959.09
21	49014.33	56232.19	114726.02	969032.31	974998.50	1005966.19
22	49039.68	56270.48	114744.79	969054.76	975028.06	1005973.30
23	49065.03	56308.79	114763.58	969077.21	975057.62	1005980.41
24	49090.37	56347.10	114782.39	969099.64	975087.16	1005987.52
25	49115.71	56385.43	114801.21	969122.05	975116.69	1005994.65
26	49141.05	56423.78	114820.05	969144.45	975146.22	1006001.77
27	49166.38	56462.13	114838.90	969166.83	975175.73	1006008.90
28	49191.71	56500.50	114857.77	969189.19	975205.23	1006016.04
29	49217.04	56538.88	114876.65	969211.55	975234.73	1006023.18
30	49242.36	56577.27	114895.55	969233.88	975264.20	1006030.32
31	49267.67	56615.68	114914.47	969256.20	975293.68	1006037.47
32	49292.98	56654.10	114933.40	969278.53	975323.14	1006044.63
33	49318.29	56692.53	114952.35	969300.86	975352.59	1006051.79
34	49343.59	56730.98	114971.32	969323.08	975382.03	1006058.95
35	49368.89	56769.44	114990.30	969345.34	975411.46	1006066.12
36	49394.19	56807.91	115009.30	969367.58	975440.88	1006073.29
37	49419.48	56846.39	115028.31	969389.81	975470.29	1006080.47
38	49444.77	56884.88	115047.34	969412.03	975499.69	1006087.66
39	49470.05	56923.39	115066.38	969434.23	975529.08	1006094.85
40	49495.33	56961.91	115085.44	969456.42	975558.46	1006102.04
41	49520.60	57000.45	115104.52	969478.59	975587.83	1006109.24
42	49545.87	57038.99	115123.61	969500.74	975617.18	1006116.44
43	49571.13	57077.55	115142.72	969522.88	975646.53	1006123.65
44	49596.39	57116.12	115161.85	969545.01	975675.87	1006130.86
45	49621.65	57154.71	115180.99	969567.12	975705.20	1006138.08
46	49646.90	57193.31	115200.15	969589.22	975734.52	1006145.30
47	49672.15	57231.92	115219.32	969611.30	975763.83	1006152.53
48	49697.40	57270.54	115238.51	969633.36	975793.13	1006159.76
49	49722.64	57309.18	115257.72	969655.41	975822.42	1006167.00
50	49747.87	57347.83	115276.94	969677.45	975851.70	1006174.24
51	49773.10	57386.49	115296.18	969699.47	975880.96	1006181.49
52	49798.33	57425.16	115315.43	969721.48	975910.22	1006188.74
53	49823.55	57463.85	115334.70	969743.47	975939.47	1006196.00
54	49848.77	57502.55	115353.99	969765.45	975968.71	1006203.26
55	49873.99	57541.26	115373.29	969787.41	975997.94	1006210.53
56	49899.20	57579.99	115392.61	969809.36	976027.16	1006217.80
57	49924.41	57618.73	115411.95	969831.29	976056.37	1006225.08
58	49949.61	57657.48	115431.30	969853.21	976085.57	1006232.36
59	49974.81	57696.25	115450.67	969875.11	976114.76	1006239.65
60	50000.00	57735.03	115470.05	969897.00	976143.94	1006246.94

Logarithm. Secante		SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologarith. pro Tangente	Tomologarith. pro Secante
05818.07	60	87461.97	180304.78	206266.53	994181.93	1025624.80	1031442.88
05825.08	59	87447.86	180281.08	206158.36	994174.92	1025505.01	1031420.09
05832.09	58	87433.75	180157.51	206050.31	994167.91	1025385.24	1031397.33
05839.10	57	87419.63	180034.08	205942.39	994160.90	1025265.47	1031374.58
05846.12	56	87405.50	179910.77	205834.60	994153.88	1025145.72	1031351.84
05853.15	55	87391.36	179787.59	205726.05	994146.85	1025025.97	1031329.12
05860.18	54	87377.22	179664.54	205619.42	994139.82	1024906.24	1031306.41
05867.21	53	87363.07	179541.62	205512.03	994132.79	1024786.51	1031283.72
05874.25	52	87348.91	179418.83	205404.76	994125.75	1024666.80	1031261.05
05881.29	51	87334.75	179296.16	205297.62	994118.71	1024547.10	1031238.39
05888.34	50	87320.58	179173.62	205190.61	994111.66	1024427.41	1031215.75
05895.39	49	87306.40	179051.21	205083.73	994104.61	1024307.73	1031193.12
05902.45	48	87292.21	178928.93	204976.98	994097.55	1024188.06	1031170.51
05909.52	47	87278.01	178806.78	204870.36	994090.48	1024068.40	1031147.91
05916.58	46	87263.81	178684.75	204763.86	994083.42	1023948.75	1031125.33
05923.66	45	87249.60	178562.85	204657.50	994076.34	1023829.11	1031102.77
05930.73	44	87235.38	178441.07	204551.26	994069.27	1023709.48	1031080.22
05937.81	43	87221.16	178319.43	204445.15	994062.19	1023589.87	1031057.68
05944.90	42	87206.93	178197.90	204339.16	994055.10	1023470.26	1031035.16
05951.99	41	87192.69	178076.51	204233.30	994048.01	1023350.66	1031012.66
05959.09	40	87178.44	177955.24	204127.57	994040.91	1023231.08	1030990.17
05966.19	39	87164.13	177834.09	204021.97	994033.81	1023111.50	1030967.69
05973.30	38	87149.93	177713.07	203916.49	994026.70	1022991.94	1030945.24
05980.41	37	87135.66	177592.18	203811.14	994019.59	1022872.38	1030922.79
05987.52	36	87121.38	177471.41	203705.92	994012.48	1022752.84	1030900.36
05994.65	35	87107.10	177350.76	203600.82	994005.35	1022633.31	1030877.95
06001.77	34	87092.81	177230.24	203495.85	993998.23	1022513.78	1030855.55
06008.90	33	87078.51	177109.85	203391.00	993991.10	1022394.27	1030833.17
06016.04	32	87064.20	176989.58	203286.27	993983.96	1022274.77	1030810.81
06023.18	31	87049.89	176869.43	203181.68	993976.82	1022155.28	1030788.45
06030.32	30	87035.57	176749.40	203077.20	993969.68	1022035.80	1030766.12
06037.47	29	87021.24	176629.50	202972.86	993962.53	1021916.32	1030743.80
06044.63	28	87006.90	176509.72	202868.63	993955.37	1021796.86	1030721.49
06051.79	27	86992.56	176390.07	202764.53	993948.21	1021677.41	1030699.20
06058.95	26	86978.21	176270.53	202660.56	993941.05	1021557.97	1030676.92
06066.12	25	86963.85	176151.12	202556.70	993933.88	1021438.54	1030654.66
06073.29	24	86949.47	176031.85	202452.97	993926.71	1021319.12	1030632.42
06080.47	23	86935.12	175912.67	202349.37	993919.53	1021200.71	1030610.19
06087.66	22	86920.74	175793.62	202245.80	993912.34	1021081.31	1030587.97
06094.85	21	86906.35	175674.70	202142.33	993905.15	1020961.92	1030565.77
06102.04	20	86891.96	175555.90	202038.90	993897.96	1020842.54	1030543.58
06109.24	19	86877.56	175437.22	201935.51	993890.76	1020723.17	1030521.41
06116.44	18	86863.15	175318.65	201832.18	993883.56	1020603.82	1030499.26
06123.65	17	86848.73	175200.23	201728.81	993876.35	1020484.47	1030477.12
06130.86	16	86834.31	175081.91	201625.46	993869.14	1020365.13	1030454.99
06138.08	15	86819.88	174963.71	201522.14	993861.92	1020245.80	1030432.88
06145.30	14	86805.44	174845.64	201418.83	993854.70	1020126.48	1030410.78
06152.53	13	86791.00	174727.68	201315.55	993847.47	1020007.17	1030388.70
06159.76	12	86776.55	174609.84	201212.29	993840.24	1019887.87	1030366.64
06167.00	11	86762.09	174492.13	201109.04	993833.00	1019768.58	1030344.59
06174.24	10	86747.62	174374.63	201005.81	993825.76	1019649.29	1030322.55
06181.49	9	86733.14	174257.35	200902.60	993818.51	1019529.99	1030300.53
06188.74	8	86718.66	174140.29	200800.41	993811.26	1019410.70	1030278.52
06196.00	7	86704.17	174023.45	200698.28	993804.00	1019291.43	1030256.53
06203.26	6	86689.67	173906.83	200596.19	993796.74	1019172.17	1030234.55
06210.53	5	86675.17	173790.43	200494.14	993789.47	1019052.92	1030212.59
06217.80	4	86660.66	173674.24	200392.12	993782.20	1018933.68	1030190.64
06225.08	3	86646.14	173558.26	200290.13	993774.92	1018814.45	1030168.71
06232.36	2	86631.61	173442.49	200188.17	993767.64	1018695.23	1030146.79
06239.65	1	86617.08	173326.93	200086.23	993760.35	1018576.02	1030124.89
06246.94	0	86602.54	173211.58	200000.00	993753.06	1018456.82	1030103.00

30	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	50000.00	57735.03	115470.05	69897.00	976143.94	1006246.94
1	50025.19	57773.82	115489.45	69918.87	976173.11	1006254.23
2	50050.38	57812.62	115508.87	69940.73	976202.27	1006261.53
3	50075.56	57851.44	115528.30	69962.58	976231.42	1006268.84
4	50100.74	57890.27	115547.75	69984.41	976260.56	1006276.15
5	50125.91	57929.11	115567.22	69906.22	976289.69	1006283.47
6	50151.08	57967.97	115586.70	69928.02	976318.81	1006290.79
7	50176.24	58006.84	115606.20	69949.81	976347.92	1006298.11
8	50201.40	58045.73	115625.72	69971.58	976377.02	1006305.44
9	50226.55	58084.62	115645.25	69993.34	976406.12	1006312.78
10	50251.70	58123.53	115664.80	69915.08	976435.20	1006320.12
11	50276.85	58162.45	115684.36	69936.81	976464.27	1006327.46
12	50301.99	58201.39	115703.94	69958.52	976493.34	1006334.81
13	50327.13	58240.34	115723.54	69980.22	976522.39	1006342.17
14	50352.27	58279.30	115743.15	69901.90	976551.43	1006349.53
15	50377.40	58318.28	115762.78	69923.57	976580.47	1006356.89
16	50402.53	58357.27	115782.43	69945.23	976609.49	1006364.26
17	50427.65	58396.27	115802.09	69966.87	976638.51	1006371.64
18	50452.77	58435.28	115821.77	69988.49	976667.51	1006379.02
19	50477.88	58474.31	115841.47	69910.11	976696.51	1006386.40
20	50502.99	58513.35	115861.18	69931.70	976725.55	1006393.79
21	50528.09	58552.41	115880.91	69953.29	976754.58	1006401.19
22	50553.19	58591.48	115900.65	69974.86	976783.54	1006408.59
23	50578.28	58630.56	115920.41	69996.41	976812.40	1006415.99
24	50603.37	58669.63	115940.19	69917.95	976841.35	1006423.40
25	50628.46	58708.76	115959.99	69939.47	976870.29	1006430.82
26	50653.55	58747.88	115979.80	69960.99	976899.22	1006438.23
27	50678.63	58787.02	115999.63	69982.48	976928.14	1006445.66
28	50703.70	58826.17	116019.47	69903.97	976957.05	1006453.09
29	50728.77	58865.33	116039.33	69925.43	976985.96	1006460.52
30	50753.84	58904.50	116059.21	69946.89	977014.85	1006467.96
31	50778.90	58943.69	116079.11	69968.33	977043.73	1006475.41
32	50803.96	58982.89	116099.02	69989.75	977072.61	1006482.85
33	50829.01	59022.11	116118.95	69911.16	977101.47	1006490.31
34	50854.06	59061.34	116138.89	69932.56	977130.33	1006497.77
35	50879.10	59100.58	116158.85	69953.94	977159.17	1006505.23
36	50904.14	59139.83	116178.83	69975.31	977188.01	1006512.70
37	50929.18	59179.10	116198.82	69996.67	977216.84	1006520.17
38	50954.21	59218.39	116218.83	69918.01	977245.66	1006527.65
39	50979.24	59257.68	116238.86	69939.33	977274.47	1006535.14
40	51004.26	59296.99	116258.91	69960.64	977303.27	1006542.62
41	51029.28	59336.32	116278.97	69981.94	977332.06	1006550.12
42	51054.29	59375.66	116299.05	69903.23	977360.84	1006557.62
43	51079.30	59415.01	116319.14	69924.50	977389.61	1006565.12
44	51104.31	59454.37	116339.25	69945.75	977418.38	1006572.63
45	51129.31	59493.75	116359.38	69967.00	977447.13	1006580.14
46	51154.31	59533.14	116379.53	69988.22	977475.88	1006587.66
47	51179.30	59572.54	116399.69	69909.43	977504.62	1006595.18
48	51204.29	59611.96	116419.87	69930.63	977533.34	1006602.71
49	51229.27	59651.40	116440.07	69951.82	977562.06	1006610.24
50	51254.25	59690.84	116460.28	69972.99	977590.77	1006617.78
51	51279.22	59730.30	116480.51	69994.15	977619.47	1006625.33
52	51304.19	59769.78	116500.76	69915.29	977648.16	1006632.87
53	51329.15	59809.27	116521.02	69936.42	977676.85	1006640.43
54	51354.12	59848.77	116541.30	69957.53	977705.52	1006647.99
55	51379.08	59888.28	116561.60	69978.63	977734.18	1006655.55
56	51404.04	59927.81	116581.91	69999.72	977762.84	1006663.12
57	51428.99	59967.33	116602.24	69911.80	977791.45	1006670.69
58	51453.93	60006.91	116622.59	69932.86	977820.12	1006678.27
59	51478.87	60046.45	116642.96	69953.90	977848.75	1006685.85
60	51503.81	60086.06	116663.34	69974.93	977877.35	1006693.44

Logarithm. Secante		SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Metalogarith. pro Tangente	Tomologarith. pro Secante
06246.94	60	86602.54	173205.08	200000.00	993753.06	1023856.06	1030103.00
06254.23	59	86587.99	173088.78	199899.29	993745.77	1023826.89	1030081.13
06261.53	58	86573.43	172972.60	199798.70	993738.47	1023797.73	1029959.27
06268.84	57	86558.87	172856.54	199698.23	993731.16	1023768.58	1029937.42
06276.15	56	86544.30	172740.60	199597.88	993723.85	1023739.44	1029915.59
06283.47	55	86529.72	172624.77	199497.64	993716.53	1023710.31	1029893.78
06290.79	54	86515.14	172509.05	199397.53	993709.21	1023681.19	1029871.98
06298.11	53	86500.55	172393.45	199297.52	993701.89	1023652.08	1029850.19
06305.44	52	86485.95	172277.97	199197.64	993694.56	1023622.98	1029828.42
06312.78	51	86471.34	172162.61	199097.87	993687.22	1023593.88	1029806.66
06320.12	50	86456.73	172047.36	198998.22	993679.88	1023564.80	1029784.92
06327.46	49	86442.11	171932.22	198898.69	993672.54	1023535.73	1029763.19
06334.81	48	86427.48	171817.20	198799.27	993665.19	1023506.66	1029741.48
06342.17	47	86412.84	171702.30	198699.97	993657.83	1023477.61	1029719.78
06349.53	46	86398.20	171587.51	198600.80	993650.47	1023448.57	1029698.10
06356.89	45	86383.55	171472.83	198501.72	993643.11	1023419.53	1029676.43
06364.26	44	86368.89	171358.27	198402.76	993635.74	1023390.51	1029654.77
06371.64	43	86354.23	171243.82	198303.93	993628.36	1023361.49	1029633.13
06379.02	42	86339.56	171129.49	198205.20	993620.98	1023332.49	1029611.51
06386.40	41	86324.88	171015.27	198106.59	993613.60	1023303.49	1029589.89
06393.79	40	86310.19	170901.16	198008.10	993606.21	1023274.50	1029568.30
06401.19	39	86295.49	170787.17	197909.72	993598.81	1023245.52	1029546.71
06408.59	38	86280.79	170673.29	197811.46	993591.41	1023216.56	1029525.14
06415.99	37	86266.08	170559.53	197713.31	993584.01	1023187.60	1029503.59
06423.40	36	86251.36	170445.87	197615.27	993576.60	1023158.65	1029482.05
06430.82	35	86236.64	170332.33	197517.35	993569.18	1023129.71	1029460.53
06438.23	34	86221.91	170218.90	197419.54	993561.77	1023100.78	1029439.03
06445.66	33	86207.17	170105.59	197321.85	993554.34	1023071.86	1029417.52
06453.09	32	86192.43	169992.38	197224.26	993546.91	1023042.95	1029396.03
06460.52	31	86177.68	169879.29	197126.80	993539.48	1023014.04	1029374.57
06467.96	30	86162.92	169766.31	197029.44	993532.04	1022985.15	1029353.11
06475.41	29	86148.15	169653.44	196932.20	993524.59	1022956.27	1029331.67
06482.85	28	86133.37	169540.69	196835.07	993517.15	1022927.39	1029310.25
06490.31	27	86118.59	169428.04	196738.05	993509.69	1022898.53	1029288.84
06497.77	26	86103.80	169315.50	196641.14	993502.23	1022869.67	1029267.44
06505.23	25	86089.00	169203.08	196544.34	993494.77	1022840.83	1029246.06
06512.70	24	86074.20	169090.77	196447.67	993487.30	1022811.99	1029224.69
06520.17	23	86059.39	168978.56	196351.10	993479.83	1022783.16	1029203.33
06527.65	22	86044.57	168866.47	196254.64	993472.35	1022754.34	1029181.99
06535.14	21	86029.74	168754.49	196158.29	993464.86	1022725.53	1029160.67
06542.62	20	86014.91	168642.61	196062.06	993457.38	1022696.73	1029139.36
06550.12	19	86000.07	168530.85	195965.93	993449.88	1022667.94	1029118.06
06557.62	18	85985.22	168419.19	195869.92	993442.38	1022639.16	1029096.77
06565.11	17	85970.37	168307.65	195774.02	993434.88	1022610.39	1029075.50
06572.63	16	85955.51	168196.21	195678.22	993427.37	1022581.62	1029054.25
06580.14	15	85940.64	168084.89	195582.54	993419.86	1022552.87	1029033.01
06587.66	14	85925.76	167973.67	195486.97	993412.34	1022524.12	1029011.78
06595.18	13	85910.88	167862.56	195391.50	993404.82	1022495.38	1028990.57
06602.71	12	85895.99	167751.56	195296.15	993397.29	1022466.66	1028969.37
06610.24	11	85881.09	167640.67	195200.91	993389.76	1022437.94	1028948.18
06617.78	10	85866.18	167529.88	195105.77	993382.22	1022409.23	1028927.01
06625.33	9	85851.27	167419.21	195010.75	993374.67	1022380.53	1028905.85
06632.87	8	85836.35	167308.64	194915.83	993367.13	1022351.84	1028884.71
06640.43	7	85821.42	167198.18	194821.02	993359.57	1022323.15	1028863.58
06647.99	6	85806.49	167087.82	194726.32	993352.01	1022294.48	1028842.47
06655.55	5	85791.55	166977.58	194631.73	993344.45	1022265.82	1028821.37
06663.12	4	85776.60	166867.44	194537.25	993336.88	1022237.16	1028800.28
06670.69	3	85761.64	166757.41	194442.88	993329.31	1022208.51	1028779.20
06678.27	2	85746.68	166647.48	194348.61	993321.73	1022179.88	1028758.14
06685.85	1	85731.71	166537.66	194254.45	993314.15	1022151.25	1028737.10
06693.44	0	85716.73	166427.95	194160.40	993306.56	1022122.63	1028716.07

31	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
1	51501.81	60086.06	116663.34	971183.93	977877.37	1006693.44
2	51528.74	60125.66	116683.74	971204.95	977935.09	1006701.03
3	51553.67	60165.27	116704.16	971225.96	977994.59	1006708.63
4	51578.50	60204.90	116724.50	971246.95	978061.18	1006716.24
5	51603.51	60244.54	116745.04	971267.92	978129.77	1006723.84
6	51628.42	60284.19	116765.51	971288.89	978200.34	1006731.46
7	51653.33	60323.85	116785.99	971309.83	978272.91	1006739.08
8	51678.24	60363.54	116806.49	971330.77	978347.47	1006746.70
9	51703.14	60403.23	116827.01	971351.69	978424.02	1006754.33
10	51728.04	60442.94	116847.55	971372.60	978501.56	1006761.96
11	51752.93	60482.66	116868.10	971393.49	978580.09	1006769.60
12	51777.82	60522.40	116888.67	971414.37	978659.61	1006777.24
13	51802.70	60562.15	116909.26	971435.24	978740.13	1006784.89
14	51827.58	60601.92	116929.86	971456.00	978821.64	1006792.54
15	51852.46	60641.70	116950.48	971476.93	978904.13	1006800.20
16	51877.33	60681.49	116971.12	971497.76	978987.62	1006807.87
17	51902.10	60721.30	116991.76	971518.57	979072.10	1006815.53
18	51927.05	60761.12	117012.4	971539.37	979157.58	1006823.21
19	51951.91	60800.95	117033.14	971560.17	979244.04	1006830.89
20	51976.76	60840.80	117053.88	971580.92	979331.49	1006838.57
21	52001.61	60880.67	117074.57	971601.65	979419.94	1006846.26
22	52026.46	60920.54	117095.31	971622.42	979509.35	1006853.95
23	52051.30	60960.43	117116.07	971643.16	979599.71	1006861.65
24	52076.13	61000.34	117136.86	971663.87	979691.02	1006869.35
25	52100.96	61040.26	117157.63	971684.58	979783.28	1006877.06
26	52125.70	61080.19	117178.45	971705.26	979876.50	1006884.78
27	52150.61	61120.14	117199.28	971725.94	979970.68	1006892.50
28	52175.43	61160.11	117220.12	971746.60	979965.82	1006900.22
29	52200.24	61200.08	117240.90	971767.25	979961.92	1006907.95
30	52225.05	61240.07	117261.87	971787.89	979958.97	1006915.68
31	52249.86	61280.08	117282.77	971808.51	979956.03	1006923.42
32	52274.66	61320.10	117303.60	971829.12	979953.08	1006931.17
33	52299.45	61360.13	117324.46	971849.71	979950.13	1006938.91
34	52324.24	61400.18	117345.34	971870.30	979947.19	1006946.67
35	52349.02	61440.24	117366.24	971890.86	979944.26	1006954.43
36	52373.81	61480.32	117387.17	971911.43	979941.31	1006962.19
37	52398.50	61520.41	117408.12	971931.96	979938.37	1006969.96
38	52423.36	61560.52	117429.09	971952.49	979935.42	1006977.74
39	52448.13	61600.64	117450.08	971973.00	979932.48	1006985.52
40	52472.90	61640.77	117471.04	971993.50	979929.54	1006993.30
41	52497.66	61680.92	117492.01	972013.99	979926.60	1007001.09
42	52522.41	61721.08	117513.00	972034.47	979923.65	1007008.88
43	52547.16	61761.26	117534.01	972054.93	979920.71	1007016.68
44	52571.91	61801.45	117555.03	972075.38	979917.76	1007024.49
45	52596.65	61841.66	117576.07	972095.81	979914.81	1007032.29
46	52621.30	61881.88	117597.13	972116.23	979911.86	1007040.11
47	52646.12	61922.11	117618.21	972136.64	979908.91	1007047.93
48	52670.85	61962.36	117639.31	972157.04	979905.96	1007055.76
49	52695.58	62002.63	117660.41	972177.42	979903.01	1007063.59
50	52720.30	62042.91	117681.54	972197.79	979900.06	1007071.43
51	52745.02	62083.20	117702.69	972218.14	979897.11	1007079.27
52	52769.73	62123.51	117723.86	972238.48	979894.16	1007087.11
53	52794.44	62163.83	117745.04	972258.81	979891.21	1007094.96
54	52819.14	62204.17	117766.24	972279.13	979888.26	1007102.82
55	52843.84	62244.52	117787.46	972299.43	979885.31	1007110.68
56	52868.53	62284.88	117808.70	972319.72	979882.36	1007118.55
57	52893.22	62325.26	117829.95	972340.00	979879.41	1007126.42
58	52917.90	62365.66	117851.21	972360.26	979876.46	1007134.29
59	52942.58	62406.07	117872.48	972380.51	979873.51	1007142.17
60	52967.26	62446.50	117893.76	972400.75	979870.56	1007150.06
61	52991.93	62486.94	117915.04	972420.97	979867.61	1007157.95

6693.44
6701.03
6708.63
6716.24
6723.84
6731.46
6739.08
6746.70
6754.33
6761.96
6769.60
6777.24
6784.89
6792.54
6800.20
6807.87
6815.53
6823.21
6830.89
6838.57
6846.26
6853.95
6861.65
6869.35
6877.06
6884.78
6892.50
6900.22
6907.95
6915.68
6923.42
6931.17
6938.91
6946.67
6954.43
6962.19
6969.96
6977.74
6985.52
6993.30
7001.09
7008.88
7016.68
7024.49
7032.30
7040.11
7047.93
7055.76
7063.59
7071.43
7079.27
7087.11
7094.96
7102.82
7110.68
7118.55
7126.42
7134.29
7142.17
7150.06
7157.95

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarithm. pro Tangente	Tomologarithm. pro Secante
60	85716.73	166427.95	194160.40	993306.56	102212.63	1228816.07
59	85701.74	166318.54	194066.46	993298.97	1022094.01	1028795.05
58	85686.75	166208.84	193972.62	993291.37	1022065.41	1028774.04
57	85671.75	166099.45	193878.89	993283.76	1022036.82	1028753.05
56	85656.74	165990.16	193785.27	993276.16	1022008.23	1028732.08
55	85641.73	165880.97	193691.76	993268.54	1021979.66	1028711.11
54	85626.71	165771.89	193598.35	993260.92	1021951.09	1028690.17
53	85611.68	165662.92	193505.05	993253.30	1021922.53	1028669.23
52	85596.64	165554.05	193411.85	993245.67	1021893.98	1028648.31
51	85581.60	165445.29	193318.76	993238.04	1021865.44	1028627.40
50	85566.55	165336.63	193225.78	993230.40	1021836.91	1028606.51
49	85551.49	165228.08	193132.90	993222.76	1021808.38	1028585.63
48	85536.42	165119.63	193040.13	993215.11	1021779.87	1028564.76
47	85521.35	165011.28	192947.46	993207.46	1021751.36	1028543.91
46	85506.27	164903.04	192854.90	993199.80	1021722.87	1028523.07
45	85491.18	164794.90	192762.44	993192.13	1021694.38	1028502.24
44	85476.09	164686.86	192670.09	993184.47	1021665.90	1028481.43
43	85460.99	164578.93	192577.84	993176.79	1021637.42	1028460.63
42	85445.88	164471.11	192485.70	993169.11	1021608.96	1028439.85
41	85430.76	164363.38	192393.66	993161.43	1021580.51	1028419.08
40	85415.64	164255.76	192301.73	993153.74	1021552.06	1028398.32
39	85400.51	164148.24	192209.90	993146.05	1021523.62	1028377.57
38	85385.37	164040.82	192118.17	993138.35	1021495.19	1028356.84
37	85370.23	163933.51	192026.55	993130.65	1021466.77	1028336.13
36	85355.08	163826.30	191935.03	993122.94	1021438.36	1028315.42
35	85339.92	163719.19	191843.62	993115.22	1021409.96	1028294.74
34	85324.75	163612.18	191752.30	993107.50	1021381.56	1028274.06
33	85309.58	163505.28	191661.09	993099.78	1021353.18	1028253.40
32	85294.40	163398.47	191569.99	993092.05	1021324.80	1028232.75
31	85279.21	163291.77	191478.99	993084.32	1021296.43	1028212.11
30	85264.02	163185.17	191388.09	993076.58	1021268.07	1028191.49
29	85248.81	163078.67	191297.29	993068.83	1021239.72	1028170.88
28	85233.60	162972.27	191206.59	993061.09	1021211.37	1028150.29
27	85218.38	162865.97	191116.00	993053.33	1021183.04	1028129.70
26	85203.15	162759.77	191025.51	993045.57	1021154.71	1028109.14
25	85187.93	162653.68	190935.12	993037.81	1021126.39	1028088.58
24	85172.69	162547.68	190844.83	993030.04	1021098.08	1028068.04
23	85157.44	162441.78	190754.64	993022.26	1021069.77	1028047.51
22	85142.19	162335.90	190664.56	993014.48	1021041.48	1028026.00
21	85126.93	162230.29	190574.57	993006.70	1021013.19	1028006.50
20	85111.66	162124.69	190484.69	992998.91	1020984.92	1027986.01
19	85096.39	162019.20	190394.91	992991.12	1020956.65	1027965.53
18	85081.11	161913.80	190305.22	992983.32	1020928.39	1027945.07
17	85065.82	161808.50	190215.64	992975.51	1020900.13	1027924.62
16	85050.52	161703.30	190126.16	992967.70	1020871.89	1027904.19
15	85035.22	161598.29	190036.78	992959.89	1020843.65	1027883.77
14	85019.91	161493.20	189947.50	992952.07	1020815.42	1027863.36
13	85004.59	161388.29	189858.32	992944.24	1020787.20	1027842.96
12	84989.27	161283.49	189769.24	992936.41	1020758.99	1027822.58
11	84973.94	161178.78	189680.26	992928.57	1020730.79	1027802.21
10	84958.60	161074.17	189591.38	992920.73	1020702.59	1027781.86
9	84943.25	160969.66	189502.59	992912.89	1020674.40	1027761.53
8	84927.90	160865.25	189413.91	992905.04	1020646.22	1027741.19
7	84912.54	160760.94	189325.32	992897.18	1020618.05	1027720.87
6	84897.17	160656.72	189236.84	992889.32	1020589.89	1027700.57
5	84881.79	160552.60	189148.45	992881.45	1020561.73	1027680.28
4	84866.41	160448.58	189060.16	992873.58	1020533.59	1027660.00
3	84851.02	160344.65	188971.97	992865.71	1020505.45	1027639.74
2	84835.62	160240.82	188883.88	992857.83	1020477.32	1027619.49
1	84820.22	160137.00	188795.80	992849.94	1020449.19	1027599.25
0	84804.81	160033.45	188707.95	992842.05	1020421.08	1027579.03

32	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologarith. pro Tangente	Tomologarith. pro Secante
0	52991.93	62486.94	117917.84	972420.38	979578.92	1007157.95
1	53016.59	62527.39	117919.28	972441.18	979607.03	1007165.85
2	53041.25	62567.86	117960.74	972461.40	979635.13	1007173.75
3	53065.91	62608.34	117982.22	972481.56	979663.22	1007181.66
4	53090.56	62648.84	118003.72	972501.74	979691.30	1007189.57
5	53115.21	62689.35	118025.23	972521.89	979719.38	1007197.49
6	53139.86	62729.88	118046.76	972542.04	979747.45	1007205.41
7	53164.50	62770.42	118068.31	972562.17	979775.51	1007213.34
8	53189.13	62810.98	118089.88	972582.29	979803.56	1007221.27
9	53213.76	62851.56	118111.47	972602.40	979831.60	1007229.21
10	53238.39	62892.15	118133.07	972622.49	979859.64	1007237.15
11	53263.01	62932.75	118154.60	972642.57	979887.67	1007245.10
12	53287.63	62973.36	118176.33	972662.64	979915.69	1007253.05
13	53312.24	63013.99	118197.99	972682.69	979943.70	1007261.01
14	53336.85	63054.64	118219.66	972702.73	979971.70	1007268.97
15	53361.45	63095.30	118241.35	972722.76	979999.70	1007276.94
16	53386.05	63135.98	118263.06	972742.78	980027.69	1007284.91
17	53410.64	63176.67	118284.7	972762.78	980055.67	1007292.89
18	53435.23	63217.38	118306.50	972782.77	980083.65	1007300.87
19	53459.82	63258.10	118328.30	972802.75	980111.61	1007308.86
20	53484.40	63298.83	118350.00	972822.71	980139.57	1007316.86
21	53508.98	63339.58	118371.88	972842.67	980167.52	1007324.86
22	53533.55	63380.35	118393.70	972862.60	980195.46	1007332.86
23	53558.12	63421.13	118415.54	972882.53	980223.40	1007340.87
24	53582.68	63461.93	118437.40	972902.44	980251.33	1007348.88
25	53607.24	63502.74	118459.27	972922.34	980279.25	1007356.90
26	53631.79	63543.57	118481.17	972942.23	980307.16	1007364.93
27	53656.34	63584.41	118503.07	972962.11	980335.06	1007372.96
28	53680.88	63625.27	118525.00	972981.97	980362.96	1007380.99
29	53705.42	63666.14	118546.94	973001.82	980390.85	1007389.04
30	53729.96	63707.03	118568.91	973021.65	980418.73	1007397.08
31	53754.49	63747.93	118590.80	973041.48	980446.61	1007405.13
32	53779.02	63788.85	118612.89	973061.29	980474.47	1007413.19
33	53803.54	63829.78	118634.91	973081.09	980502.33	1007421.25
34	53828.06	63870.73	118656.91	973100.87	980530.19	1007429.31
35	53852.57	63911.60	118679.00	973120.64	980558.03	1007437.39
36	53877.08	63952.67	118701.07	973140.40	980585.87	1007445.46
37	53901.58	63993.66	118723.16	973160.15	980613.70	1007453.54
38	53926.08	64034.67	118745.27	973179.89	980641.52	1007461.63
39	53950.58	64075.69	118767.40	973199.61	980669.33	1007469.72
40	53975.07	64116.73	118789.55	973219.32	980697.14	1007477.82
41	53999.55	64157.79	118811.71	973239.02	980724.94	1007485.92
42	54024.03	64198.86	118833.89	973258.70	980752.73	1007494.03
43	54048.51	64239.95	118856.09	973278.37	980780.52	1007502.14
44	54072.98	64281.05	118878.31	973298.03	980808.29	1007510.26
45	54097.45	64322.16	118900.55	973317.68	980836.06	1007518.39
46	54121.91	64363.29	118922.81	973337.31	980863.83	1007526.51
47	54146.37	64404.44	118945.08	973356.93	980891.58	1007534.65
48	54170.82	64445.60	118967.37	973376.54	980919.33	1007542.79
49	54195.27	64486.78	118989.68	973396.14	980947.07	1007550.93
50	54219.71	64527.97	119012.01	973415.72	980974.80	1007559.08
51	54244.15	64569.18	119034.36	973435.29	981002.53	1007567.23
52	54268.59	64610.41	119056.73	973454.85	981030.25	1007575.39
53	54293.02	64651.65	119079.12	973474.40	981057.96	1007583.56
54	54317.44	64692.90	119101.52	973493.93	981085.66	1007591.73
55	54341.86	64734.17	119123.94	973513.45	981113.36	1007599.90
56	54366.28	64775.46	119146.38	973532.96	981141.05	1007608.09
57	54390.69	64816.76	119168.84	973552.46	981168.73	1007616.27
58	54415.10	64858.08	119191.32	973571.95	981196.41	1007624.46
59	54439.50	64899.41	119213.82	973591.42	981224.08	1007632.66
60	54463.90	64940.76	119236.33	973610.88	981251.74	1007640.86

Logarithm.
Secante

007157.95
007165.85
007173.75
007181.66
007189.57
007197.49
007205.41
007213.34
007221.27
007229.21
007237.15
007245.10
007253.05
007261.01
007268.97
007276.94
007284.91
007292.89
007300.87
007308.86
007316.86
007324.86
007332.86
007340.87
007348.88
007356.90
007364.93
007372.96
007380.99
007389.04
007397.08
007405.13
007413.19
007421.25
007429.31
007437.39
007445.46
007453.54
007461.63
007469.72
007477.82
007485.92
007494.03
007502.14
007510.26
007518.39
007526.51
007534.65
007542.79
007550.93
007559.08
007567.23
007575.39
007583.56
007591.73
007600.00
007608.27
007616.46
007624.66
007632.86
007640.86

SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
60	84804.81	160033.45	188707.99	992842.05	1020421.08
59	84789.39	159929.91	188620.19	992834.15	1020301.97
58	84773.96	159826.47	188532.49	992826.25	1020364.87
57	84758.53	159723.12	188444.89	992818.34	1020336.78
56	84743.09	159619.87	188357.28	992810.43	1020308.70
55	84727.64	159516.72	188269.97	992802.51	1020280.62
54	84712.19	159413.66	188182.66	992794.59	1020252.55
53	84696.73	159310.70	188095.45	992786.66	1020224.49
52	84681.26	159207.83	188008.33	992778.73	1020196.44
51	84665.78	159105.05	187921.31	992770.79	1020168.40
50	84650.30	159002.38	187834.38	992762.85	1020140.36
49	84634.81	158899.79	187747.55	992754.90	1020112.33
48	84619.31	158797.20	187660.82	992746.95	1020084.31
47	84603.81	158694.61	187574.18	992739.03	1020056.30
46	84588.30	158592.01	187487.64	992731.09	1020028.30
45	84572.78	158490.41	187401.20	992723.06	1020000.30
44	84557.25	158388.30	187314.85	992715.09	1019972.31
43	84541.72	158286.28	187228.59	992707.11	1019944.33
42	84526.18	158184.36	187142.43	992699.13	1019916.35
41	84510.63	158082.35	187056.37	992691.14	1019888.39
40	84495.08	157980.79	186970.40	992683.14	1019860.43
39	84479.52	157879.15	186884.53	992675.14	1019832.48
38	84463.95	157777.60	186798.75	992667.14	1019804.54
37	84448.37	157676.15	186713.06	992659.13	1019776.60
36	84432.79	157574.79	186627.47	992651.12	1019748.67
35	84417.20	157473.52	186541.97	992643.10	1019720.75
34	84401.60	157372.34	186456.57	992635.07	1019692.84
33	84386.00	157271.26	186371.26	992627.04	1019664.94
32	84370.39	157170.26	186286.05	992619.01	1019637.04
31	84354.77	157069.56	186200.93	992610.96	1019609.15
30	84339.14	156968.86	186115.90	992602.92	1019581.27
29	84323.51	156867.82	186030.96	992594.87	1019553.39
28	84307.87	156767.22	185946.12	992586.81	1019525.53
27	84292.22	156666.69	185861.38	992578.75	1019497.67
26	84276.57	156566.25	185776.72	992570.69	1019469.81
25	84260.91	156465.90	185692.16	992562.61	1019441.97
24	84245.24	156365.64	185607.69	992554.54	1019414.13
23	84229.56	156265.48	185523.31	992546.46	1019386.30
22	84213.88	156165.40	185439.03	992538.37	1019358.48
21	84198.19	156065.42	185354.83	992530.28	1019330.67
20	84182.49	155965.52	185270.73	992522.18	1019302.86
19	84166.79	155865.72	185186.72	992514.08	1019275.05
18	84151.08	155766.01	185102.81	992505.97	1019247.27
17	84135.36	155666.39	185018.98	992497.86	1019219.48
16	84119.63	155566.85	184935.25	992489.74	1019191.71
15	84103.90	155467.41	184851.61	992481.61	1019163.94
14	84088.15	155368.06	184768.05	992473.49	1019136.17
13	84072.41	155268.80	184684.59	992465.35	1019108.42
12	84056.66	155169.63	184601.23	992457.21	1019080.67
11	84040.90	155070.54	184517.95	992449.07	1019052.93
10	84025.15	154971.55	184434.76	992440.92	1019025.20
9	84009.35	154872.64	184351.66	992432.77	1018997.47
8	83993.57	154773.83	184268.66	992424.61	1018969.75
7	83977.78	154675.10	184185.74	992416.44	1018942.04
6	83961.98	154576.46	184102.92	992408.27	1018914.34
5	83946.18	154477.92	184020.18	992400.10	1018886.64
4	83930.37	154379.46	183937.53	992391.91	1018858.95
3	83914.55	154281.08	183854.98	992383.73	1018831.27
2	83898.73	154182.80	183772.51	992375.54	1018803.59
1	83882.90	154084.60	183690.13	992367.34	1018775.92
0	83867.06	153986.50	183607.84	992359.14	1018748.25

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33	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomeologarith. pro Secante
0	54463.90	64940.76	119236.33	973610.88	981251.74	1007640.86
1	54488.30	64982.12	119258.86	973630.32	981279.39	1007649.07
2	54512.69	65023.50	119281.41	973649.76	981307.04	1007657.28
3	54537.07	65064.90	119303.98	973669.18	981334.68	1007665.50
4	54561.45	65106.31	119326.57	973688.59	981362.31	1007673.72
5	54585.83	65147.74	119349.18	973707.99	981389.93	1007681.95
6	54610.20	65189.18	119371.81	973727.37	981417.55	1007690.18
7	54634.56	65230.64	119394.46	973746.75	981445.16	1007698.42
8	54658.92	65272.11	119417.12	973766.11	981472.77	1007706.66
9	54683.28	65313.60	119439.80	973785.46	981500.36	1007714.91
10	54707.63	65355.11	119462.50	973804.79	981527.95	1007723.16
11	54731.98	65396.63	119485.22	973824.12	981555.54	1007731.42
12	54756.32	65438.17	119507.96	973843.43	981583.11	1007739.69
13	54780.66	65479.72	119530.72	973862.73	981610.68	1007747.95
14	54804.99	65521.29	119553.50	973882.01	981638.24	1007756.23
15	54829.32	65562.87	119576.30	973901.29	981665.80	1007764.51
16	54853.65	65604.47	119599.11	973920.55	981693.35	1007772.79
17	54877.97	65646.09	119621.94	973939.80	981720.89	1007781.09
18	54902.28	65687.71	119644.79	973959.04	981748.42	1007789.38
19	54926.59	65729.37	119667.66	973978.27	981775.95	1007797.68
20	54950.90	65771.03	119690.55	973997.48	981803.47	1007805.99
21	54975.20	65812.71	119713.46	974016.68	981830.98	1007814.30
22	54999.50	65854.41	119736.39	974035.87	981858.49	1007822.62
23	55023.79	65896.12	119759.34	974055.05	981885.99	1007830.94
24	55048.08	65937.85	119782.31	974074.21	981913.48	1007839.27
25	55072.36	65979.59	119805.29	974093.37	981940.96	1007847.60
26	55096.64	66021.35	119828.29	974112.51	981968.44	1007855.94
27	55120.91	66063.13	119851.31	974131.64	981995.92	1007864.28
28	55145.18	66104.92	119874.35	974150.75	982023.38	1007872.63
29	55169.44	66146.73	119897.41	974169.86	982050.84	1007880.98
30	55193.70	66188.56	119920.49	974188.95	982078.29	1007889.34
31	55217.95	66230.40	119943.59	974208.03	982105.74	1007897.71
32	55242.20	66272.26	119966.71	974227.10	982133.17	1007906.07
33	55266.45	66314.13	119989.85	974246.16	982160.60	1007914.45
34	55290.69	66356.02	120013.01	974265.20	982188.03	1007922.83
35	55314.92	66397.92	120036.19	974284.23	982215.45	1007931.22
36	55339.15	66439.84	120059.38	974303.25	982242.86	1007939.61
37	55363.38	66481.78	120082.59	974322.26	982270.26	1007948.00
38	55387.60	66523.73	120105.82	974341.26	982297.66	1007956.40
39	55411.82	66565.70	120129.07	974360.24	982325.05	1007964.81
40	55436.03	66607.69	120152.34	974379.21	982352.44	1007973.22
41	55460.24	66649.69	120175.63	974398.17	982379.81	1007981.64
42	55484.44	66691.71	120198.94	974417.12	982407.19	1007990.06
43	55508.64	66733.75	120222.27	974436.06	982434.55	1007998.49
44	55532.83	66775.80	120245.62	974454.98	982461.91	1008006.92
45	55557.01	66817.87	120268.99	974473.90	982489.26	1008015.36
46	55581.21	66859.95	120292.37	974492.80	982516.60	1008023.81
47	55605.39	66902.05	120315.77	974511.69	982543.94	1008032.25
48	55629.56	66944.17	120339.19	974530.56	982571.27	1008040.71
49	55653.73	66986.30	120362.64	974549.43	982598.60	1008049.17
50	55677.90	67028.45	120386.10	974568.28	982625.92	1008057.63
51	55702.06	67070.62	120409.58	974587.12	982653.23	1008066.10
52	55726.21	67112.80	120433.08	974605.95	982680.53	1008074.58
53	55750.36	67155.00	120456.60	974624.77	982707.83	1008083.06
54	55774.51	67197.21	120480.14	974643.58	982735.13	1008091.55
55	55798.65	67239.44	120503.70	974662.37	982762.41	1008100.04
56	55822.79	67281.69	120527.28	974681.15	982789.69	1008108.54
57	55846.92	67323.96	120550.88	974699.92	982816.96	1008117.04
58	55871.05	67366.24	120574.50	974718.68	982844.23	1008125.55
59	55895.17	67408.52	120598.14	974737.43	982871.49	1008134.06
60	55919.29	67450.85	120621.80	974756.17	982898.74	1008142.58

logarith.
Secante

07640.86
07649.07
07657.28
07665.50
07673.72
07681.95
07690.18
07698.42
07706.66
07714.91
07723.16
07731.42
07739.69
07747.95
07756.23
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07847.60
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07864.28
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07939.61
07948.00
07956.40
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07981.64
07990.06
07998.49
08006.92
08015.36
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08032.25
08040.71
08049.17
08057.63
08066.10
08074.58
08083.06
08091.55
08100.04
08108.54
08117.04
08125.55
08134.06
08142.58

SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
60	83867.06	153086.50	992359.14	1018748.26	1026389.12
59	83851.21	153888.43	992350.93	1018720.61	1026369.08
58	83835.36	153790.55	992341.72	1018692.06	1026350.24
57	83819.50	153692.70	992334.50	1018665.32	1026330.82
56	83803.63	153594.04	992326.28	1018637.69	1026311.41
55	83787.75	153497.27	992318.05	1018610.07	1026292.01
54	83771.87	153399.69	992309.82	1018582.45	1026272.63
53	83755.98	153302.20	992301.58	1018554.84	1026253.25
52	83740.08	153204.79	992293.34	1018527.23	1026233.89
51	83724.18	153107.47	992285.09	1018499.64	1026214.54
50	83708.27	153010.23	992276.84	1018472.05	1026195.21
49	83692.35	152913.08	992268.58	1018444.46	1026175.88
48	83676.43	152816.02	992260.32	1018416.89	1026156.57
47	83660.50	152719.04	992252.05	1018389.32	1026137.27
46	83644.56	152622.25	992243.77	1018361.76	1026117.99
45	83628.61	152525.35	992235.49	1018334.20	1026098.71
44	83612.66	152428.63	992227.21	1018306.65	1026079.45
43	83596.70	152332.00	992218.91	1018279.11	1026060.20
42	83580.73	152235.45	992210.62	1018251.58	1026040.96
41	83564.76	152138.09	992202.32	1018224.05	1026021.73
40	83548.78	152042.61	992194.01	1018196.53	1026002.52
39	83532.79	151946.32	992185.70	1018169.02	1025983.32
38	83516.80	151850.12	992177.38	1018141.51	1025964.13
37	83500.80	151754.00	992169.06	1018114.01	1025944.95
36	83484.79	151657.96	992160.73	1018086.52	1025925.79
35	83468.77	151562.01	992152.40	1018059.04	1025906.63
34	83452.75	151466.14	992144.06	1018031.56	1025887.49
33	83436.73	151370.36	992135.72	1018004.08	1025868.36
32	83420.68	151274.66	992127.37	1017976.62	1025849.25
31	83404.63	151179.05	992119.02	1017949.16	1025830.14
30	83388.58	151083.52	992110.65	1017921.71	1025811.05
29	83372.52	150988.07	992102.29	1017894.26	1025791.97
28	83356.45	150892.71	992093.93	1017866.83	1025772.90
27	83340.38	150797.43	992085.55	1017839.40	1025753.84
26	83324.30	150702.24	992077.17	1017811.97	1025734.80
25	83308.21	150607.13	992068.78	1017784.55	1025715.77
24	83292.12	150512.10	992060.39	1017757.14	1025696.75
23	83276.02	150417.16	992052.00	1017729.74	1025677.74
22	83260.01	150322.30	992043.60	1017702.34	1025658.74
21	83243.80	150227.52	992035.19	1017674.95	1025639.76
20	83227.68	150132.82	992026.78	1017647.56	1025620.79
19	83211.55	150038.20	992018.36	1017620.19	1025601.83
18	83195.47	149943.67	992009.94	1017592.81	1025582.88
17	83179.27	149849.22	992001.51	1017565.45	1025563.94
16	83163.12	149754.86	991993.08	1017538.09	1025545.02
15	83146.96	149660.58	991984.64	1017510.74	1025526.10
14	83130.79	149566.38	991976.19	1017483.40	1025507.20
13	83114.62	149472.26	991967.75	1017456.06	1025488.31
12	83098.44	149378.22	991959.29	1017428.73	1025469.44
11	83082.26	149284.26	991950.83	1017401.40	1025450.57
10	83066.07	149190.38	991942.37	1017374.08	1025431.72
9	83049.87	149096.59	991933.90	1017346.77	1025412.88
8	83033.66	149002.88	991925.42	1017319.47	1025394.05
7	83017.45	148909.25	991916.94	1017292.17	1025375.23
6	83001.23	148815.70	991908.45	1017264.87	1025356.42
5	82985.00	148722.23	991899.96	1017237.59	1025337.63
4	82968.76	148628.84	991891.46	1017210.31	1025318.85
3	82952.52	148535.53	991882.96	1017183.04	1025300.08
2	82936.27	148442.30	991874.45	1017155.77	1025281.32
1	82920.02	148349.16	991865.94	1017128.51	1025262.57
0	82903.76	148256.10	991857.42	1017101.26	1025243.83

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K 2

34	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	55919.29	67450.85	120621.80	974756.17	982898.74	1008142.58
1	55943.40	67493.18	120645.48	974774.89	982925.99	1008151.10
2	55967.51	67535.53	120669.18	974793.60	982953.23	1008159.63
3	55991.61	67577.90	120692.89	974812.30	982980.47	1008168.17
4	56015.71	67620.28	120716.62	974830.99	983007.69	1008176.71
5	56039.81	67662.68	120740.37	974849.67	983034.92	1008185.25
6	56063.90	67705.09	120764.14	974868.33	983062.13	1008193.80
7	56087.98	67747.52	120787.93	974886.98	983089.34	1008202.36
8	56112.06	67789.97	120811.75	974905.62	983116.54	1008210.92
9	56136.14	67832.44	120835.95	974924.25	983143.74	1008219.49
10	56160.21	67874.92	120859.44	974942.87	983170.93	1008228.06
11	56184.28	67917.42	120883.51	974961.48	983198.11	1008236.64
12	56208.34	67959.93	120907.20	974980.07	983225.29	1008245.22
13	56232.39	68002.46	120931.12	974998.66	983252.46	1008253.81
14	56256.44	68045.01	120955.05	975017.23	983279.63	1008262.40
15	56280.49	68087.58	120979.00	975035.79	983306.79	1008271.00
16	56304.53	68130.16	121002.97	975054.34	983333.94	1008279.60
17	56328.57	68172.76	121026.96	975072.87	983361.09	1008288.21
18	56352.60	68215.33	121050.97	975091.40	983388.23	1008296.83
19	56376.63	68258.01	121075.00	975109.91	983415.36	1008305.45
20	56400.65	68300.66	121099.05	975128.42	983442.49	1008314.07
21	56424.67	68343.33	121123.12	975146.91	983469.61	1008322.70
22	56448.69	68386.01	121147.21	975165.38	983496.73	1008331.34
23	56472.70	68428.71	121171.32	975183.85	983523.84	1008339.98
24	56496.70	68471.43	121195.45	975202.31	983550.94	1008348.63
25	56520.70	68514.17	121219.60	975220.75	983578.04	1008357.28
26	56544.69	68556.92	121243.77	975239.19	983605.13	1008365.94
27	56568.68	68599.69	121267.96	975257.61	983632.21	1008374.61
28	56592.67	68642.47	121292.17	975276.02	983659.29	1008383.27
29	56616.65	68685.27	121316.40	975294.41	983686.36	1008391.95
30	56640.62	68728.10	121340.64	975312.80	983713.43	1008400.63
31	56664.59	68770.94	121364.91	975331.18	983740.49	1008409.31
32	56688.56	68813.79	121389.20	975349.54	983767.55	1008418.00
33	56712.52	68856.66	121413.51	975367.90	983794.60	1008426.70
34	56736.48	68899.55	121437.83	975386.24	983821.64	1008435.40
35	56760.43	68942.46	121462.18	975404.57	983848.67	1008444.11
36	56784.37	68985.38	121486.55	975422.88	983875.71	1008452.82
37	56808.31	69028.32	121510.94	975441.19	983902.73	1008461.54
38	56832.25	69071.28	121535.35	975459.49	983929.75	1008470.26
39	56856.18	69114.25	121559.78	975477.77	983956.76	1008478.99
40	56880.11	69157.24	121584.23	975496.04	983983.77	1008487.72
41	56904.03	69200.25	121608.70	975514.31	984010.77	1008496.46
42	56927.95	69243.28	121633.19	975532.56	984037.76	1008505.21
43	56951.86	69286.33	121657.70	975550.80	984064.75	1008513.96
44	56975.77	69329.39	121682.23	975569.02	984091.74	1008522.71
45	56999.68	69372.47	121706.78	975587.24	984118.71	1008531.48
46	57023.58	69415.57	121731.35	975605.44	984145.69	1008540.24
47	57047.47	69458.68	121755.94	975623.64	984172.65	1008549.01
48	57071.36	69501.81	121780.55	975641.82	984199.61	1008557.79
49	57095.24	69544.96	121805.18	975659.99	984226.57	1008566.58
50	57119.12	69588.13	121829.83	975678.15	984253.51	1008575.36
51	57142.99	69631.31	121854.50	975696.30	984280.46	1008584.16
52	57166.86	69674.51	121879.19	975714.44	984307.39	1008592.96
53	57190.73	69717.73	121903.90	975732.56	984334.32	1008601.76
54	57214.59	69760.97	121928.64	975750.68	984361.25	1008610.57
55	57238.44	69804.22	121953.39	975768.78	984388.17	1008619.39
56	57262.29	69847.49	121978.16	975786.87	984415.08	1008628.21
57	57286.14	69890.78	122002.96	975804.95	984441.99	1008637.04
58	57309.98	69934.09	122027.77	975823.02	984468.89	1008645.87
59	57333.81	69977.41	122052.60	975841.08	984495.79	1008654.71
60	57357.64	70020.75	122077.46	975859.13	984522.68	1008663.55

Logarithm.
Secante

008142.58
008151.10
008159.63
008168.17
008176.71
008185.25
008193.80
008202.36
008210.92
008219.49
008228.06
008236.64
008245.22
008253.81
008262.40
008271.00
008279.60
008288.21
008296.83
008305.45
008314.07
008322.70
008331.34
008339.98
008348.63
008357.28
008365.94
008374.61
008383.27
008391.95
008400.63
008409.31
008418.00
008426.70
008435.40
008444.11
008452.82
008461.54
008470.26
008478.99
008487.72
008496.46
008505.21
008513.96
008522.71
008531.48
008540.24
008549.01
008557.79
008566.58
008575.36
008584.16
008592.96
008601.76
008610.57
008619.39
008628.21
008637.04
008645.87
008654.71
008663.55

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarithb. pro Tangente	Tomologarithb. pro Secante
60	82903.76	148256.10	178829.16	991857.42	1017101.26	1025243.85
59	82887.49	148163.11	178752.08	991848.90	1017074.01	1025225.11
58	82871.21	148070.21	178675.08	991840.37	1017046.77	1025206.40
57	82854.93	147977.38	178598.17	991831.83	1017019.53	1025187.70
56	82838.64	147884.63	178521.33	991823.29	1016992.31	1025169.01
55	82822.34	147791.97	178444.57	991814.75	1016965.08	1025150.33
54	82806.05	147699.38	178367.90	991806.20	1016937.87	1025131.67
53	82789.72	147606.88	178291.51	991797.64	1016910.66	1025113.02
52	82773.40	147514.45	178214.79	991789.08	1016883.46	1025094.38
51	82757.07	147422.10	178138.56	991780.51	1016856.26	1025075.75
50	82740.74	147329.83	178062.01	991771.94	1016829.07	1025057.13
49	82724.40	147237.64	177985.74	991763.36	1016801.89	1025038.52
48	82708.05	147145.53	177909.55	991754.78	1016774.71	1025019.93
47	82691.70	147053.50	177833.43	991746.19	1016747.54	1025001.34
46	82675.34	146961.55	177757.40	991737.60	1016720.37	1024982.77
45	82658.97	146869.67	177681.45	991729.00	1016693.21	1024964.21
44	82642.60	146777.87	177605.58	991720.40	1016666.06	1024945.66
43	82626.22	146686.16	177529.79	991711.79	1016638.91	1024927.13
42	82609.83	146594.52	177454.08	991703.17	1016611.77	1024908.60
41	82593.43	146502.96	177378.45	991694.55	1016584.64	1024890.09
40	82577.03	146411.47	177302.90	991685.93	1016557.51	1024871.58
39	82560.62	146320.07	177227.43	991677.30	1016530.39	1024853.09
38	82544.20	146228.74	177152.04	991668.66	1016503.27	1024834.62
37	82527.78	146137.49	177076.73	991660.02	1016476.16	1024816.15
36	82511.35	146046.32	177001.49	991651.37	1016449.06	1024797.69
35	82494.91	145955.22	176926.33	991642.72	1016421.96	1024779.25
34	82478.47	145864.20	176851.25	991634.06	1016394.87	1024760.81
33	82462.02	145773.26	176776.25	991625.39	1016367.79	1024742.39
32	82445.56	145682.40	176701.33	991616.73	1016340.71	1024723.98
31	82429.09	145591.61	176626.49	991608.05	1016313.64	1024705.58
30	82412.62	145500.90	176551.73	991599.37	1016286.57	1024687.20
29	82396.14	145410.27	176477.04	991590.69	1016259.51	1024668.82
28	82379.65	145319.71	176402.43	991582.00	1016232.45	1024650.46
27	82363.16	145229.23	176327.91	991573.30	1016205.40	1024632.10
26	82346.66	145138.83	176253.45	991564.60	1016178.36	1024613.76
25	82330.15	145048.50	176179.08	991555.89	1016151.33	1024595.43
24	82313.64	144958.25	176104.78	991547.18	1016124.29	1024577.12
23	82297.12	144868.08	176030.56	991538.46	1016097.27	1024558.84
22	82280.59	144777.98	175956.42	991529.74	1016070.25	1024540.51
21	82264.05	144687.96	175882.36	991521.01	1016043.24	1024522.23
20	82247.51	144598.01	175808.37	991512.28	1016016.23	1024503.96
19	82230.96	144508.14	175734.46	991503.54	1015989.23	1024485.69
18	82214.40	144418.34	175660.63	991494.79	1015962.24	1024467.44
17	82197.84	144328.62	175586.87	991486.04	1015935.25	1024449.20
16	82181.27	144238.97	175513.19	991477.29	1015908.26	1024430.98
15	82164.69	144149.40	175439.59	991468.52	1015881.29	1024412.76
14	82148.11	144059.91	175366.07	991459.76	1015854.31	1024394.56
13	82131.52	143970.49	175292.62	991450.99	1015827.35	1024376.36
12	82114.92	143881.14	175219.24	991442.21	1015800.39	1024358.18
11	82098.31	143791.87	175145.94	991433.42	1015773.43	1024340.01
10	82081.70	143702.68	175072.73	991424.64	1015746.49	1024321.85
9	82065.08	143613.56	174999.58	991415.84	1015719.54	1024303.70
8	82048.46	143524.51	174926.51	991407.04	1015692.61	1024285.56
7	82031.83	143435.54	174853.52	991398.24	1015665.68	1024267.44
6	82015.19	143346.64	174780.60	991389.43	1015638.75	1024249.32
5	82008.54	143257.81	174707.76	991380.61	1015611.83	1024231.22
4	82001.89	143169.06	174634.99	991371.79	1015584.92	1024213.13
3	81985.23	143080.39	174562.30	991362.96	1015558.01	1024195.05
2	81968.56	142991.78	174489.69	991354.13	1015531.11	1024176.98
1	81951.89	142903.26	174417.15	991345.30	1015504.21	1024158.92
0	81935.21	142814.80	174344.68	991336.45	1015477.32	1024140.87

35	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	57357.64	70020.75	122077.46	975859.13	984522.68	1008663.55
1	57381.47	70064.11	122102.33	975877.17	984549.56	1008672.40
2	57405.29	70107.49	122127.23	975895.10	984576.44	1008681.25
3	57429.11	70150.87	122152.15	975913.21	984603.32	1008690.11
4	57452.92	70194.39	122177.08	975931.21	984630.18	1008698.98
5	57476.72	70237.73	122202.04	975949.20	984657.05	1008707.85
6	57500.52	70281.18	122227.02	975967.18	984683.90	1008716.72
7	57524.32	70324.65	122252.02	975985.15	984710.75	1008725.60
8	57548.11	70368.11	122277.03	976003.11	984737.60	1008734.49
9	57571.90	70411.63	122302.07	976021.06	984764.44	1008743.38
10	57595.68	70455.15	122327.13	976038.99	984791.27	1008752.28
11	57619.46	70498.69	122352.21	976056.92	984818.10	1008761.18
12	57643.23	70542.24	122377.32	976074.83	984844.92	1008770.09
13	57667.00	70585.81	122402.44	976092.74	984871.74	1008779.01
14	57690.76	70629.42	122427.58	976110.63	984898.55	1008787.91
15	57714.52	70673.01	122452.74	976128.51	984925.36	1008796.85
16	57738.27	70716.64	122477.93	976146.38	984952.16	1008805.78
17	57762.02	70760.29	122503.12	976164.24	984978.96	1008814.72
18	57785.76	70803.95	122528.36	976182.08	985005.75	1008823.66
19	57809.50	70847.63	122553.61	976199.92	985032.53	1008832.61
20	57833.23	70891.33	122578.87	976217.75	985059.31	1008841.54
21	57856.96	70935.05	122604.16	976235.56	985086.08	1008850.52
22	57880.68	70978.78	122629.47	976253.37	985112.85	1008859.46
23	57904.40	71022.53	122654.80	976271.16	985139.61	1008868.45
24	57928.12	71066.30	122680.15	976288.94	985166.37	1008877.43
25	57951.83	71110.09	122705.52	976306.71	985193.12	1008886.41
26	57975.52	71153.90	122730.91	976324.47	985219.87	1008895.40
27	57999.21	71197.71	122756.32	976342.22	985246.61	1008904.30
28	58022.92	71241.57	122781.76	976359.96	985273.35	1008913.30
29	58046.61	71285.42	122807.21	976377.69	985300.08	1008922.31
30	58070.30	71329.31	122832.69	976395.40	985326.80	1008931.40
31	58093.98	71373.21	122858.19	976413.11	985353.52	1008940.41
32	58117.65	71417.11	122883.71	976430.80	985380.23	1008949.43
33	58141.31	71461.06	122909.25	976448.49	985406.94	1008958.45
34	58164.96	71505.01	122934.81	976466.16	985433.65	1008967.46
35	58188.64	71548.98	122960.39	976483.82	985460.34	1008976.52
36	58212.30	71592.97	122985.99	976501.47	985487.04	1008985.56
37	58235.95	71636.98	123011.61	976519.11	985513.72	1008994.61
38	58259.59	71681.01	123037.25	976536.74	985540.41	1009003.66
39	58283.21	71725.05	123062.92	976554.36	985567.08	1009012.72
40	58306.87	71769.11	123088.61	976571.97	985593.76	1009021.76
41	58330.50	71813.19	123114.32	976589.57	985620.43	1009030.85
42	58354.12	71857.29	123140.05	976607.16	985647.08	1009039.93
43	58377.74	71901.41	123165.80	976624.73	985673.74	1009049.01
44	58401.36	71945.55	123191.57	976642.29	985700.39	1009058.10
45	58424.97	71989.70	123217.36	976659.85	985727.04	1009067.20
46	58448.57	72033.87	123243.17	976677.39	985753.68	1009076.20
47	58472.17	72078.06	123269.00	976694.92	985780.31	1009085.30
48	58495.77	72122.27	123294.86	976712.44	985806.94	1009094.50
49	58519.36	72166.50	123320.74	976729.96	985833.57	1009103.61
50	58542.94	72210.75	123346.64	976747.46	985860.19	1009112.73
51	58566.52	72255.02	123372.56	976764.94	985886.80	1009121.86
52	58590.10	72299.31	123398.50	976782.42	985913.41	1009130.99
53	58613.67	72343.61	123424.46	976799.89	985940.02	1009140.12
54	58637.24	72387.93	123450.44	976817.35	985966.61	1009149.27
55	58660.80	72432.27	123476.45	976834.80	985993.21	1009158.41
56	58684.35	72476.63	123502.48	976852.23	986019.80	1009167.57
57	58707.90	72521.01	123528.52	976869.66	986046.38	1009176.73
58	58731.45	72565.41	123554.59	976887.07	986072.96	1009185.89
59	58754.99	72609.83	123580.68	976904.48	986099.54	1009195.06
60	58778.53	72654.26	123606.80	976921.87	986126.10	1009204.24

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ante663.55
672.40
681.25
690.11
698.98
707.85
716.72
725.60
734.49
743.38
752.28
761.18
770.09
778.91
787.02
796.85
805.78
814.72
823.66
832.61
841.54
850.52
859.46
868.45
877.43
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895.40
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922.31
931.40
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958.45
967.40
976.52
985.56
994.61
1003.61
1012.77
1021.70
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1039.93
1049.01
1058.10
1067.10
1076.20
1085.30
1094.50
1103.61
1112.73
1121.86
1130.99
1140.12
1149.27
1158.41
1167.57
1176.73
1185.80
1194.96
1204.24

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
60	81915.21	142814.80	174344.68	991336.45	1015477.32	1024140.87
59	81898.52	142726.42	174272.29	991327.60	1015450.44	1024122.83
58	81881.82	142638.11	174199.97	991318.75	1015423.56	1024104.81
57	81865.12	142549.87	174127.73	991309.89	1015396.68	1024086.79
56	81848.41	142461.71	174055.56	991301.02	1015369.82	1024068.79
55	81831.69	142373.62	173983.47	991292.15	1015342.95	1024050.80
54	81814.97	142285.61	173911.45	991283.28	1015316.10	1024032.82
53	81798.24	142197.66	173839.51	991274.40	1015289.25	1024014.85
52	81781.50	142109.79	173767.64	991265.51	1015262.40	1023996.89
51	81764.76	142022.00	173695.85	991256.62	1015235.56	1023978.94
50	81748.01	141934.27	173624.13	991247.72	1015208.73	1023961.01
49	81731.25	141846.62	173552.47	991238.82	1015181.90	1023943.08
48	81714.49	141759.04	173480.90	991229.91	1015155.08	1023925.17
47	81697.72	141671.53	173409.41	991220.99	1015128.26	1023907.26
46	81680.94	141584.09	173337.98	991212.07	1015101.45	1023889.37
45	81664.15	141496.73	173266.63	991203.15	1015074.64	1023871.49
44	81647.36	141409.43	173195.35	991194.22	1015047.84	1023853.62
43	81630.56	141322.21	173124.14	991185.28	1015021.04	1023835.76
42	81613.76	141235.06	173053.01	991176.34	1014994.25	1023817.92
41	81596.95	141147.99	172981.95	991167.39	1014967.47	1023800.08
40	81580.13	141060.98	172910.96	991158.44	1014940.69	1023782.25
39	81563.30	140974.05	172840.05	991149.48	1014913.92	1023764.44
38	81546.47	140887.18	172769.21	991140.51	1014887.15	1023746.63
37	81529.63	140800.39	172698.44	991131.55	1014860.39	1023728.84
36	81512.78	140713.67	172627.74	991122.57	1014833.63	1023711.06
35	81495.93	140627.02	172557.12	991113.59	1014806.88	1023693.29
34	81479.06	140540.44	172486.57	991104.60	1014780.13	1023675.53
33	81462.19	140453.93	172416.07	991095.61	1014753.39	1023657.78
32	81445.32	140367.49	172345.68	991086.61	1014726.65	1023640.04
31	81428.44	140281.13	172275.34	991077.61	1014699.92	1023622.31
30	81411.55	140194.83	172205.08	991068.60	1014673.20	1023604.60
29	81394.65	140108.60	172134.89	991059.59	1014646.48	1023586.89
28	81377.75	140022.45	172064.77	991050.57	1014619.77	1023569.20
27	81360.84	139936.36	171994.72	991041.55	1014593.06	1023551.51
26	81343.93	139850.33	171924.75	991032.51	1014566.35	1023533.84
25	81327.01	139764.40	171854.84	991023.48	1014539.66	1023516.18
24	81310.08	139678.52	171785.01	991014.44	1014512.96	1023498.53
23	81293.14	139592.72	171715.25	991005.39	1014486.28	1023480.89
22	81276.20	139506.98	171645.56	990996.34	1014459.59	1023463.26
21	81259.25	139421.31	171575.94	990987.28	1014432.92	1023445.64
20	81242.29	139335.71	171506.39	990978.21	1014406.24	1023428.03
19	81225.32	139250.18	171436.91	990969.15	1014379.58	1023410.43
18	81208.35	139164.73	171367.50	990960.07	1014352.92	1023392.85
17	81191.37	139079.34	171298.17	990950.99	1014326.26	1023375.27
16	81174.39	138994.01	171228.90	990941.90	1014299.61	1023357.71
15	81157.40	138908.76	171159.70	990932.81	1014272.96	1023340.15
14	81140.40	138823.58	171090.58	990923.71	1014246.32	1023322.61
13	81123.39	138738.46	171021.52	990914.61	1014219.69	1023305.08
12	81106.38	138653.42	170952.54	990905.50	1014193.06	1023287.56
11	81089.36	138568.44	170883.62	990896.39	1014166.43	1023270.04
10	81072.33	138483.53	170814.78	990887.27	1014139.81	1023252.54
9	81055.30	138398.69	170746.02	990878.14	1014113.20	1023235.06
8	81038.26	138313.92	170677.30	990869.01	1014086.59	1023217.58
7	81021.21	138229.22	170608.66	990859.88	1014059.98	1023200.11
6	81004.16	138144.58	170540.10	990850.73	1014033.39	1023182.65
5	80987.10	138060.01	170471.60	990841.59	1014006.79	1023165.20
4	80970.03	137975.51	170403.18	990832.43	1013980.20	1023147.77
3	80952.96	137891.08	170334.82	990823.27	1013953.62	1023130.34
2	80935.88	137806.72	170266.53	990814.11	1013927.04	1023112.93
1	80918.79	137722.42	170198.31	990804.94	1013900.46	1023095.52
0	80901.70	137638.19	170130.16	990795.76	1013873.90	1023078.13

36	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	58778.53	72654.26	123606.80	976921.87	986126.10	1009204.24
1	58802.06	72698.71	123632.94	976939.25	986152.67	1009213.42
2	58825.58	72743.18	123659.09	976956.62	986179.23	1009222.60
3	58849.10	72787.67	123685.26	976973.98	986205.78	1009231.80
4	58872.62	72832.18	123711.43	976991.34	986232.33	1009240.99
5	58896.13	72876.71	123737.63	977008.68	986258.87	1009250.20
6	58919.64	72921.26	123763.93	977226.01	986285.41	1009259.41
7	58943.14	72965.82	123790.19	977043.32	986311.95	1009268.62
8	58966.63	73010.40	123816.47	977060.63	986338.48	1009277.84
9	58990.12	73055.01	123842.78	977077.93	986365.00	1009287.07
10	59013.61	73099.63	123869.11	977095.22	986391.52	1009296.30
11	59037.09	73144.27	123895.46	977112.49	986418.03	1009305.54
12	59060.57	73188.94	123921.83	977129.76	986444.54	1009314.78
13	59084.04	73233.62	123948.22	977147.02	986471.05	1009324.03
14	59107.50	73278.31	123974.64	977164.26	986497.55	1009333.29
15	59130.96	73323.03	124001.08	977181.50	986524.04	1009342.55
16	59154.42	73367.77	124027.54	977198.72	986550.53	1009351.81
17	59177.87	73412.53	124054.02	977215.93	986577.02	1009361.08
18	59201.32	73457.30	124080.52	977233.14	986603.50	1009370.36
19	59224.76	73502.10	124107.04	977250.33	986630.00	1009379.64
20	59248.19	73546.91	124133.50	977267.51	986656.44	1009388.93
21	59271.62	73591.74	124160.16	977284.68	986682.91	1009398.23
22	59295.05	73636.60	124186.75	977301.85	986709.37	1009407.53
23	59318.47	73681.47	124213.36	977319.00	986735.83	1009416.83
24	59341.89	73726.36	124239.99	977336.14	986762.28	1009426.14
25	59365.30	73771.27	124266.65	977353.27	986788.73	1009435.46
26	59388.71	73816.20	124293.33	977370.39	986815.17	1009444.78
27	59412.11	73861.15	124320.03	977387.49	986841.60	1009454.11
28	59435.50	73906.11	124346.75	977404.59	986868.04	1009463.44
29	59458.89	73951.10	124373.49	977421.68	986894.46	1009472.7
30	59482.28	73996.11	124400.26	977438.76	986920.89	1009482.13
31	59505.66	74041.14	124427.05	977455.83	986947.31	1009491.48
32	59529.03	74086.18	124453.86	977472.88	986973.72	1009500.84
33	59552.40	74131.24	124480.69	977489.93	987000.13	1009510.20
34	59575.77	74176.33	124507.54	977506.97	987026.53	1009519.57
35	59599.13	74221.43	124534.42	977523.99	987052.93	1009528.94
36	59622.49	74266.55	124561.31	977541.01	987079.33	1009538.32
37	59645.84	74311.70	124588.23	977558.01	987105.72	1009547.70
38	59669.18	74356.86	124615.18	977575.01	987132.10	1009557.06
39	59692.52	74402.04	124642.14	977591.99	987158.48	1009566.49
40	59715.86	74447.24	124669.13	977608.97	987184.86	1009575.86
41	59739.19	74492.46	124696.14	977625.93	987211.23	1009585.50
42	59762.51	74537.70	124723.17	977642.89	987237.60	1009594.71
43	59785.83	74582.06	124750.22	977659.83	987263.96	1009604.13
44	59809.15	74626.24	124777.30	977676.76	987290.32	1009613.56
45	59832.46	74671.54	124804.40	977693.69	987316.68	1009622.99
46	59855.76	74716.85	124831.52	977710.60	987343.02	1009632.43
47	59879.06	74762.20	124858.66	977727.50	987369.37	1009641.87
48	59902.36	74807.56	124885.83	977744.39	987395.71	1009651.32
49	59925.65	74852.94	124913.02	977761.28	987422.04	1009660.77
50	59948.93	74900.33	124940.23	977778.15	987448.38	1009670.23
51	59972.21	74945.75	124967.46	977795.01	987474.70	1009679.69
52	59995.49	74991.19	124994.71	977811.86	987501.02	1009689.16
53	60018.76	75036.65	125021.99	977828.70	987527.34	1009698.64
54	60042.02	75082.12	125049.29	977845.53	987553.65	1009708.12
55	60065.28	75127.62	125076.61	977862.35	987579.96	1009717.61
56	60088.53	75173.14	125103.96	977879.16	987606.27	1009727.11
57	60111.78	75218.67	125131.33	977895.96	987632.57	1009736.61
58	60135.03	75264.23	125158.72	977912.75	987658.86	1009746.11
59	60158.27	75309.81	125186.13	977929.53	987685.15	1009755.62
60	60181.50	75355.40	125213.57	977946.30	987711.44	1009765.14

2204.24
2213.42
222.60
231.80
240.99
250.20
259.41
268.62
277.84
287.07
296.30
305.54
314.78
324.03
333.29
342.55
351.81
361.08
370.36
379.64
388.93
398.23
407.53
416.83
426.14
435.46
444.78
454.11
463.44
472.7
482.13
491.48
500.84
510.20
519.57
529.94
538.33
547.70
557.05
566.49
575.86
585.30
594.71
604.13
613.56
622.99
632.43
641.87
651.32
660.77
670.23
679.69
689.16
698.64
708.12
717.61
727.11
736.61
746.11
755.62
765.14

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meologarith. pro Tangente	Tomologarith. pro Secante
60	80901.70	137638.19	170130.16	990795.76	1013873.90	1023078.13
59	80884.60	137554.03	170062.08	990786.58	1013847.33	1023060.75
58	80867.49	137469.94	169994.07	990777.40	1013820.77	1023043.38
57	80850.37	137385.91	169926.12	990768.20	1013794.22	1023026.02
56	80833.25	137301.95	169858.25	990759.01	1013767.67	1023008.66
55	80816.12	137218.05	169790.44	990749.80	1013741.13	1022991.31
54	80798.99	137134.23	169722.71	990740.59	1013714.59	1022973.99
53	80781.85	137050.47	169655.04	990731.38	1013688.05	1022956.68
52	80764.70	136966.78	169587.43	990722.16	1013661.52	1022939.37
51	80747.54	136883.15	169519.90	990712.93	1013635.00	1022922.07
50	80730.38	136799.59	169452.44	990703.70	1013608.48	1022904.78
49	80713.21	136716.10	169385.04	990694.46	1013581.97	1022887.51
48	80696.03	136632.67	169317.71	990685.22	1013555.46	1022870.24
47	80678.85	136549.03	169250.45	990675.97	1013528.95	1022852.98
46	80661.66	136466.02	169183.26	990666.71	1013502.45	1022835.74
45	80644.46	136382.79	169116.13	990657.45	1013475.96	1022818.50
44	80627.26	136299.03	169049.07	990648.19	1013449.47	1022801.28
43	80610.05	136216.53	168982.08	990638.92	1013422.98	1022784.07
42	80592.83	136133.50	168915.16	990629.64	1013396.50	1022766.86
41	80575.60	136050.54	168848.30	990620.36	1013370.03	1022749.67
40	80558.37	135967.64	168781.51	990611.07	1013343.56	1022732.49
39	80541.13	135884.81	168714.79	990601.77	1013317.09	1022715.33
38	80523.80	135802.04	168648.14	990592.47	1013290.63	1022698.15
37	80506.64	135719.34	168581.55	990583.17	1013264.17	1022681.00
36	80489.38	135636.70	168515.03	990573.86	1013237.72	1022663.86
35	80472.11	135554.13	168448.57	990564.54	1013211.27	1022646.73
34	80454.84	135471.62	168382.18	990555.22	1013184.83	1022629.61
33	80437.56	135389.18	168315.86	990545.89	1013158.40	1022612.51
32	80420.28	135306.80	168249.61	990536.56	1013131.96	1022595.41
31	80402.99	135224.49	168183.42	990527.22	1013105.54	1022578.32
30	80385.69	135142.24	168117.30	990517.87	1013079.11	1022561.24
29	80368.38	135060.06	168051.24	990508.52	1013052.69	1022544.17
28	80351.07	134977.94	167985.25	990499.16	1013026.28	1022527.12
27	80333.75	134895.89	167919.33	990489.80	1012999.87	1022510.07
26	80316.42	134813.90	167853.47	990480.43	1012973.47	1022493.03
25	80299.09	134731.97	167787.68	990471.06	1012947.07	1022476.01
24	80281.75	134650.11	167721.95	990461.68	1012920.67	1022458.99
23	80264.40	134568.32	167656.20	990452.30	1012894.28	1022441.99
22	80247.05	134486.58	167590.40	990442.91	1012867.90	1022424.99
21	80229.69	134404.92	167525.17	990433.51	1012841.52	1022408.01
20	80212.32	134323.31	167459.70	990424.11	1012815.14	1022391.03
19	80194.94	134241.77	167394.30	990414.70	1012788.77	1022374.07
18	80177.56	134160.29	167328.97	990405.29	1012762.40	1022357.11
17	80160.17	134078.88	167263.70	990395.87	1012736.04	1022340.17
16	80142.78	133997.53	167198.50	990386.44	1012709.68	1022323.24
15	80125.38	133916.24	167133.36	990377.01	1012683.32	1022306.31
14	80107.97	133835.02	167068.28	990367.57	1012656.98	1022289.40
13	80090.56	133753.86	167003.28	990358.13	1012630.63	1022272.50
12	80073.14	133672.76	166938.33	990348.68	1012604.29	1022255.61
11	80055.71	133591.72	166873.45	990339.23	1012577.96	1022238.73
10	80038.27	133510.75	166808.64	990329.77	1012551.62	1022221.85
9	80020.83	133429.84	166743.89	990320.31	1012525.30	1022204.99
8	80003.38	133349.00	166679.20	990310.84	1012498.98	1022188.14
7	79985.93	133268.22	166614.58	990301.36	1012472.66	1022171.30
6	79968.47	133187.49	166550.02	990291.88	1012446.35	1022154.47
5	79951.00	133106.84	166485.52	990282.39	1012420.04	1022137.65
4	79933.52	133026.24	166421.09	990272.89	1012393.73	1022120.84
3	79916.04	132945.71	166356.73	990263.39	1012367.43	1022104.04
2	79898.55	132865.24	166292.43	990253.89	1012341.14	1022087.25
1	79881.05	132784.83	166228.19	990244.38	1012314.85	1022070.47
0	79863.55	132704.48	166164.01	990234.86	1012288.56	1022053.70

37	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
0	60181.50	75355.40	125213.57	977946.30	987711.44	1009765.14
1	60204.73	75401.02	125241.02	977963.06	987737.72	1009774.66
2	60227.95	75446.66	125268.50	977979.81	987764.00	1009784.19
3	60251.17	75492.32	125296.01	977996.55	987790.27	1009793.72
4	60274.39	75537.99	125323.53	978013.28	987816.54	1009803.26
5	60297.60	75583.69	125351.08	978030.00	987842.81	1009812.81
6	60320.80	75629.41	125378.65	978046.71	987869.07	1009822.36
7	60344.00	75675.14	125406.25	978063.41	987895.33	1009831.92
8	60367.19	75720.90	125433.87	978080.10	987921.58	1009841.48
9	60390.38	75766.68	125461.51	978096.77	987947.82	1009851.05
10	60413.56	75812.48	125489.17	978113.44	987974.07	1009860.62
11	60436.74	75858.29	125516.85	978130.10	988000.31	1009870.20
12	60459.91	75904.13	125544.56	978146.75	988026.54	1009879.79
13	60483.08	75949.99	125572.29	978163.39	988052.77	1009889.38
14	60506.24	75995.87	125600.05	978180.02	988079.00	1009898.98
15	60529.40	76041.77	125627.82	978196.64	988105.22	1009908.58
16	60552.55	76087.69	125655.62	978213.24	988131.44	1009918.19
17	60575.70	76133.63	125683.45	978229.84	988157.65	1009927.81
18	60598.84	76179.59	125711.29	978246.43	988183.86	1009937.43
19	60621.98	76225.57	125739.16	978263.01	988210.07	1009947.06
20	60645.11	76271.57	125767.05	978279.58	988236.27	1009956.69
21	60668.23	76317.59	125794.97	978296.14	988262.46	1009966.33
22	60691.35	76363.63	125822.91	978312.68	988288.66	1009975.97
23	60714.47	76409.69	125850.87	978329.22	988314.84	1009985.62
24	60737.58	76455.77	125878.85	978345.75	988341.03	1009995.28
25	60760.69	76501.88	125906.86	978362.27	988367.21	1010004.94
26	60783.79	76548.00	125934.89	978378.78	988393.38	1010014.61
27	60806.89	76594.14	125962.94	978395.28	988419.56	1010024.28
28	60829.98	76640.31	125991.02	978411.77	988445.72	1010033.96
29	60853.06	76686.49	126019.12	978428.24	988471.89	1010043.64
30	60876.14	76732.70	126047.24	978444.71	988498.05	1010053.33
31	60899.22	76778.93	126075.39	978461.17	988524.20	1010063.03
32	60922.29	76825.17	126103.56	978477.62	988550.35	1010072.73
33	60945.35	76871.44	126131.75	978494.06	988576.50	1010082.44
34	60968.41	76917.73	126159.97	978510.49	988602.64	1010092.16
35	60991.47	76964.04	126188.20	978526.91	988628.78	1010101.88
36	61014.52	77010.37	126216.46	978543.32	988654.92	1010111.60
37	61037.56	77056.72	126244.75	978559.72	988681.05	1010121.33
38	61060.60	77103.09	126273.06	978576.11	988707.18	1010131.07
39	61083.63	77149.48	126301.40	978592.49	988733.30	1010140.81
40	61106.66	77195.89	126329.75	978608.86	988759.42	1010150.56
41	61129.68	77242.33	126358.13	978625.22	988785.54	1010160.32
42	61152.70	77288.79	126386.53	978641.57	988811.65	1010170.09
43	61175.72	77335.26	126414.96	978657.91	988837.75	1010179.85
44	61198.73	77381.75	126443.41	978674.24	988863.86	1010189.62
45	61221.73	77428.27	126471.83	978690.56	988889.96	1010199.40
46	61244.73	77474.81	126500.38	978706.87	988916.05	1010209.18
47	61267.72	77521.37	126528.90	978723.17	988942.14	1010218.97
48	61290.71	77567.95	126557.45	978739.46	988968.23	1010228.77
49	61313.69	77614.55	126586.01	978755.74	988994.32	1010238.57
50	61336.66	77661.17	126614.60	978772.02	989020.40	1010248.38
51	61359.63	77707.82	126643.22	978788.28	989046.47	1010258.19
52	61382.60	77754.48	126671.86	978804.53	989072.54	1010268.01
53	61405.56	77801.17	126700.52	978820.77	989098.61	1010277.84
54	61428.52	77847.88	126729.21	978837.01	989124.68	1010287.67
55	61451.47	77894.60	126757.92	978853.23	989150.74	1010297.51
56	61474.42	77941.35	126786.65	978869.44	989176.79	1010307.35
57	61497.36	77988.13	126815.41	978885.65	989202.85	1010317.20
58	61520.29	78034.92	126844.19	978901.84	989228.90	1010327.06
59	61543.22	78081.73	126872.99	978918.02	989254.94	1010336.92
60	61566.15	78128.56	126901.82	978934.20	989280.98	1010346.79

Logarithm.
cantate

9765.14
9774.66
9784.19
9793.72
9803.26
9812.81
9822.36
9831.92
9841.48
9851.05
9860.62
9870.20
9879.79
9889.38
9898.98
9908.58
9918.19
9927.81
9937.43
9947.06
9956.69
9966.33
9975.97
9985.62
9995.28
0004.94
0014.61
0024.28
0033.96
0043.64
0053.33
0063.03
0072.73
0082.44
0092.16
0101.88
0111.60
0121.33
0131.07
0140.81
0150.56
0160.32
0170.03
0179.85
0189.62
0199.40
0209.18
0218.97
0228.77
0238.57
0248.38
0258.19
0268.01
0277.84
0287.67
0297.51
0307.35
0317.20
0327.06
0336.92
0346.79

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Metologarith. pro Tangente	Tomologarith. pro Secante
60	79863.55	132704.48	166164.01	990234.86	1012288.56	1022053.70
59	79846.04	132624.20	166099.90	990215.34	1012162.28	1022036.94
58	79828.52	132543.97	166035.85	990195.81	1012036.00	1021920.19
57	79811.00	132463.81	165971.87	990176.28	1011909.73	1021803.45
56	79793.47	132383.71	165907.95	990156.74	1011783.46	1021686.72
55	79775.93	132303.68	165844.00	990137.19	1011657.19	1021570.00
54	79758.39	132223.70	165780.30	990117.64	1011530.93	1021453.29
53	79740.84	132143.79	165716.57	990098.08	1011404.67	1021336.59
52	79723.28	132063.93	165652.00	990078.52	1011278.42	1021219.90
51	79705.72	131984.14	165587.29	990058.95	1011152.18	1021103.23
50	79688.15	131904.41	165522.75	990039.38	1011025.93	1020986.56
49	79670.57	131824.74	165458.27	990019.80	1010899.69	1020869.90
48	79652.99	131745.11	165393.85	990000.21	1010773.46	1020753.25
47	79635.40	131665.59	165329.50	990010.62	1010647.23	1020636.61
46	79617.80	131586.10	165272.21	990001.02	1010521.00	1020519.98
45	79600.20	131506.63	165208.98	990001.42	1010394.78	1020403.36
44	79582.59	131427.31	165145.81	990001.81	1010268.56	1020286.76
43	79564.97	131348.01	165082.70	990002.20	1010142.35	1020170.16
42	79547.35	131268.76	165019.66	990002.57	1010016.14	1020053.57
41	79529.72	131189.58	164956.68	990002.94	1010016.14	1020053.57
40	79512.08	131110.46	164893.76	990003.31	1010016.14	1020053.57
39	79494.43	131031.40	164830.90	990003.67	1010016.14	1020053.57
38	79476.78	130952.39	164768.11	990004.03	1010016.14	1020053.57
37	79459.12	130873.45	164705.37	990004.38	1010016.14	1020053.57
36	79441.46	130794.57	164642.70	990004.72	1010016.14	1020053.57
35	79423.79	130715.75	164580.09	990005.06	1010016.14	1020053.57
34	79406.11	130636.99	164517.54	990005.39	1010016.14	1020053.57
33	79388.41	130558.28	164455.06	990005.72	1010016.14	1020053.57
32	79370.74	130479.63	164392.63	990006.04	1010016.14	1020053.57
31	79353.04	130401.06	164330.27	990006.36	1010016.14	1020053.57
30	79335.33	130322.54	164267.96	990006.67	1010016.14	1020053.57
29	79317.62	130244.07	164205.72	990006.97	1010016.14	1020053.57
28	79299.90	130165.67	164143.54	990007.27	1010016.14	1020053.57
27	79282.18	130087.32	164081.42	990007.56	1010016.14	1020053.57
26	79264.45	130009.04	164019.36	990007.84	1010016.14	1020053.57
25	79246.71	129930.81	163957.36	990008.12	1010016.14	1020053.57
24	79228.96	129852.65	163895.42	990008.40	1010016.14	1020053.57
23	79211.21	129774.54	163833.5	990008.67	1010016.14	1020053.57
22	79193.45	129696.49	163771.73	990008.93	1010016.14	1020053.57
21	79175.69	129618.50	163709.97	990009.19	1010016.14	1020053.57
20	79157.92	129540.57	163648.28	990009.44	1010016.14	1020053.57
19	79140.14	129462.60	163586.64	990009.68	1010016.14	1020053.57
18	79122.35	129384.88	163525.07	990009.92	1010016.14	1020053.57
17	79104.56	129307.12	163463.55	990010.15	1010016.14	1020053.57
16	79086.76	129229.43	163402.00	990010.38	1010016.14	1020053.57
15	79068.96	129151.79	163340.50	990010.60	1010016.14	1020053.57
14	79051.15	129074.21	163279.37	990010.82	1010016.14	1020053.57
13	79033.33	128996.60	163218.00	990011.03	1010016.14	1020053.57
12	79015.50	128919.22	163156.88	990011.23	1010016.14	1020053.57
11	78997.67	128841.82	163095.72	990011.43	1010016.14	1020053.57
10	78979.83	128764.47	163034.62	990011.62	1010016.14	1020053.57
9	78961.98	128687.18	162973.59	990011.81	1010016.14	1020053.57
8	78944.13	128609.95	162912.61	990012.00	1010016.14	1020053.57
7	78926.27	128532.77	162851.69	990012.16	1010016.14	1020053.57
6	78908.41	128455.66	162790.83	990012.33	1010016.14	1020053.57
5	78890.54	128378.60	162729.03	990012.49	1010016.14	1020053.57
4	78872.66	128301.60	162669.20	990012.65	1010016.14	1020053.57
3	78854.77	128224.66	162608.61	990012.80	1010016.14	1020053.57
2	78836.88	128147.76	162547.99	990012.94	1010016.14	1020053.57
1	78818.98	128070.93	162487.43	990013.08	1010016.14	1020053.57
0	78801.07	127994.16	162426.92	990013.21	1010016.14	1020053.57

38	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	61566.15	78128.56	126901.82	978934.20	989280.98	1010346.79
1	61589.07	78175.42	126930.67	978950.36	989307.02	1010356.66
2	61611.98	78222.29	126959.55	978966.52	989333.06	1010366.54
3	61634.89	78269.19	126988.45	978982.66	989359.09	1010376.42
4	61657.79	78316.11	127017.37	978998.80	989385.11	1010386.31
5	61680.69	78363.05	127046.32	979014.93	989411.14	1010396.21
6	61703.59	78410.02	127075.29	979031.04	989437.15	1010406.11
7	61726.48	78457.00	127104.29	979047.15	989463.17	1010416.02
8	61749.36	78504.00	127133.31	979063.25	989489.18	1010425.94
9	61772.24	78551.03	127162.35	979079.33	989515.19	1010435.86
10	61795.11	78598.78	127191.42	979095.41	989541.19	1010445.78
11	61817.98	78645.15	127220.51	979111.48	989567.19	1010455.72
12	61840.84	78692.24	127249.63	979127.54	989593.19	1010465.65
13	61863.70	78739.35	127278.77	979143.59	989619.18	1010475.60
14	61886.55	78786.49	127307.94	979159.63	989645.17	1010485.55
15	61909.40	78833.64	127337.12	979175.66	989671.16	1010495.50
16	61932.24	78880.82	127366.34	979191.68	989697.14	1010505.47
17	61955.07	78928.02	127395.57	979207.69	989723.12	1010515.43
18	61977.90	78975.24	127424.84	979223.69	989749.10	1010525.41
19	62000.73	79022.48	127454.12	979239.68	989775.07	1010535.39
20	62023.55	79069.75	127483.43	979255.66	989801.04	1010545.37
21	62046.36	79117.03	127512.76	979271.63	989827.00	1010555.37
22	62069.17	79164.34	127542.12	979287.60	989852.96	1010565.36
23	62091.98	79211.67	127571.50	979303.55	989878.92	1010575.37
24	62114.78	79259.02	127600.91	979319.49	989904.87	1010585.38
25	62137.57	79306.40	127630.34	979335.43	989930.82	1010595.39
26	62160.36	79353.79	127659.80	979351.35	989956.77	1010605.42
27	62183.14	79401.21	127689.28	979367.27	989982.71	1010615.44
28	62205.92	79448.65	127718.78	979383.17	990008.65	1010625.48
29	62228.69	79496.11	127748.31	979399.07	990034.59	1010635.52
30	62251.46	79543.59	127777.87	979414.96	990060.52	1010645.56
31	62274.22	79591.10	127807.45	979430.83	990086.45	1010655.61
32	62296.98	79638.62	127837.05	979446.70	990112.37	1010665.67
33	62319.73	79686.17	127866.67	979462.56	990138.30	1010675.74
34	62342.48	79733.74	127896.32	979478.41	990164.22	1010685.81
35	62365.22	79781.34	127926.00	979494.25	990190.13	1010695.88
36	62387.96	79828.95	127955.70	979510.08	990216.04	1010705.96
37	62410.69	79876.59	127985.43	979525.90	990241.95	1010716.05
38	62433.42	79924.25	128015.18	979541.71	990267.86	1010726.15
39	62456.14	79971.93	128044.95	979557.51	990293.76	1010736.25
40	62478.85	80019.63	128074.75	979573.30	990319.66	1010746.35
41	62501.56	80067.36	128104.57	979589.09	990345.55	1010756.46
42	62524.26	80115.11	128134.42	979604.86	990371.44	1010766.58
43	62546.96	80162.88	128164.30	979620.62	990397.33	1010776.71
44	62569.66	80210.67	128194.20	979636.38	990423.21	1010786.84
45	62592.35	80258.48	128224.12	979652.12	990449.10	1010796.97
46	62615.03	80306.32	128254.07	979667.86	990474.97	1010807.11
47	62637.71	80354.18	128284.04	979683.59	990500.85	1010817.26
48	62660.38	80402.06	128314.04	979699.30	990526.72	1010827.42
49	62683.05	80449.97	128344.06	979715.01	990552.59	1010837.58
50	62705.71	80497.90	128374.11	979730.71	990578.45	1010847.74
51	62728.37	80545.85	128404.18	979746.40	990604.31	1010857.92
52	62751.02	80593.82	128434.28	979762.08	990630.17	1010868.09
53	62773.66	80641.81	128464.40	979777.75	990656.03	1010878.28
54	62796.30	80689.83	128494.55	979793.41	990681.88	1010888.47
55	62818.94	80737.87	128524.72	979809.06	990707.73	1010898.67
56	62841.57	80785.93	128554.92	979824.70	990733.57	1010908.87
57	62864.20	80834.01	128585.14	979840.34	990759.41	1010919.08
58	62886.82	80882.12	128615.39	979855.96	990785.25	1010929.29
59	62909.43	80930.25	128645.66	979871.58	990811.09	1010939.51
60	62932.04	80978.40	128675.96	979887.18	990836.92	1010949.74

Logarithm.
cantate

0346.79
0356.66
0366.54
0376.42
0386.31
0396.21
0406.11
0416.02
0425.94
0435.86
0445.78
0455.72
0465.65
0475.60
0485.55
0495.50
0505.47
0515.43
0525.41
0535.39
0545.37
0555.37
0565.36
0575.37
0585.38
0595.39
0605.42
0615.44
0625.48
0635.52
0645.56
0655.61
0665.67
0675.74
0685.81
0695.88
0705.06
0716.05
0726.15
0736.25
0746.35
0756.40
0766.58
0776.71
0786.84
0796.97
0807.11
0817.26
0827.42
0837.58
0847.74
0857.92
0868.09
0878.28
0888.47
0898.67
0908.87
0919.08
0929.29
0939.51
0949.74

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologarith. pro Tangente	Tomologarith. pro Secante
60	78801.07	127994.16	162426.92	989653.21	1010719.02	1021065.80
59	78783.16	127917.45	162366.48	989643.34	1010692.98	1021049.64
58	78765.24	127840.79	162306.09	989633.46	1010666.94	1021033.48
57	78747.32	127764.19	162245.76	989623.58	1010640.91	1021017.34
56	78729.39	127687.64	162185.49	989613.69	1010614.89	1021001.20
55	78711.45	127611.16	162125.28	989603.79	1010588.86	1020985.07
54	78693.50	127534.73	162065.13	989593.89	1010562.85	1020968.96
53	78675.55	127458.36	162005.04	989583.98	1010536.83	1020952.85
52	78657.59	127382.04	161945.00	989574.06	1010510.82	1020936.75
51	78639.62	127305.78	161885.02	989564.14	1010484.81	1020920.67
50	78621.65	127229.57	161825.10	989554.22	1010458.81	1020904.59
49	78603.67	127153.42	161765.24	989544.29	1010432.81	1020888.52
48	78585.69	127077.33	161705.44	989534.35	1010406.81	1020872.46
47	78567.70	127001.30	161645.69	989524.40	1010380.82	1020856.41
46	78549.70	126925.32	161586.00	989514.45	1010354.83	1020840.37
45	78531.69	126849.39	161526.37	989504.50	1010328.84	1020824.34
44	78513.68	126773.53	161466.80	989494.53	1010302.86	1020808.32
43	78495.66	126697.72	161407.28	989484.57	1010276.88	1020792.31
42	78477.64	126621.96	161347.83	989474.59	1010250.90	1020776.31
41	78459.61	126546.26	161288.43	989464.63	1010224.93	1020760.33
40	78441.57	126470.62	161229.08	989454.63	1010198.96	1020744.34
39	78423.52	126395.03	161169.80	989444.63	1010173.00	1020728.37
38	78405.47	126319.50	161110.57	989434.64	1010147.04	1020712.40
37	78387.41	126244.02	161051.40	989424.63	1010121.08	1020696.45
36	78369.35	126168.60	160992.28	989414.62	1010095.13	1020680.51
35	78351.28	126093.23	160933.23	989404.61	1010069.18	1020664.57
34	78333.20	126017.92	160874.23	989394.58	1010043.23	1020648.65
33	78315.11	125942.67	160815.28	989384.56	1010017.29	1020632.73
32	78297.02	125867.47	160756.40	989374.52	1009991.35	1020616.82
31	78278.92	125792.32	160697.57	989364.48	1009965.41	1020600.93
30	78260.82	125717.23	160638.79	989354.44	1009939.48	1020585.04
29	78242.71	125642.19	160580.08	989344.39	1009913.55	1020569.17
28	78224.59	125567.21	160521.42	989334.33	1009887.63	1020553.30
27	78206.46	125492.29	160462.81	989324.26	1009861.70	1020537.44
26	78188.33	125417.42	160404.26	989314.19	1009835.78	1020521.59
25	78170.19	125342.60	160345.77	989304.12	1009809.87	1020505.75
24	78152.05	125267.84	160287.34	989294.04	1009783.96	1020489.92
23	78133.90	125193.13	160228.96	989283.95	1009758.05	1020474.10
22	78115.74	125118.48	160170.64	989273.85	1009732.14	1020458.29
21	78097.57	125043.83	160112.37	989263.75	1009706.24	1020442.49
20	78079.40	124969.33	160054.16	989253.65	1009680.34	1020426.70
19	78061.22	124894.84	159996.00	989243.54	1009654.45	1020410.91
18	78043.04	124820.40	159937.90	989233.42	1009628.56	1020395.14
17	78024.85	124746.02	159879.86	989223.29	1009602.67	1020379.38
16	78006.65	124671.69	159821.87	989213.16	1009576.79	1020363.62
15	77988.45	124597.42	159763.94	989203.03	1009550.90	1020347.88
14	77970.24	124523.20	159706.06	989192.89	1009525.03	1020332.14
13	77952.02	124449.03	159648.24	989182.74	1009499.15	1020316.41
12	77933.80	124374.92	159590.47	989172.58	1009473.28	1020300.70
11	77915.57	124300.86	159532.76	989162.42	1009447.41	1020284.99
10	77897.33	124226.85	159475.11	989152.26	1009421.55	1020269.29
9	77879.08	124152.90	159417.51	989142.08	1009395.69	1020253.60
8	77860.83	124079.00	159359.96	989131.91	1009369.83	1020237.92
7	77842.57	124005.15	159302.47	989121.72	1009343.97	1020222.25
6	77824.31	123931.36	159245.04	989111.53	1009318.12	1020206.59
5	77806.04	123857.62	159187.66	989101.33	1009292.27	1020190.94
4	77787.77	123783.93	159130.33	989091.13	1009266.43	1020175.30
3	77769.49	123710.30	159073.06	989080.92	1009240.59	1020159.66
2	77751.20	123636.72	159015.84	989070.71	1009214.75	1020144.04
1	77732.90	123563.19	158958.68	989060.49	1009188.91	1020128.42
0	77714.60	123489.72	158901.57	989050.26	1009163.08	1020112.82

39	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
0	629;2.04	80978.40	128675.06	979887.18	990836.02	1010949.74
1	62954.64	81026.58	128706.28	979902.78	990862.75	1010959.97
2	62977.24	81074.78	128736.63	979918.36	990888.58	1010970.24
3	62999.83	81123.00	128767.00	979933.94	990914.40	1010980.46
4	63022.42	81171.24	128797.40	979949.51	990940.22	1010990.71
5	63045.00	81219.51	128827.82	979965.07	990966.03	1011000.97
6	63067.58	81267.80	128858.27	979980.62	990991.85	1011011.23
7	63090.15	81316.11	128888.75	979996.16	991017.66	1011021.50
8	63112.72	81364.44	128919.25	980011.69	991043.47	1011031.78
9	63135.28	81412.80	128949.77	980027.21	991069.27	1011042.06
10	63157.84	81461.18	128980.32	980042.72	991095.07	1011052.35
11	63180.30	81509.54	129010.90	980058.23	991120.87	1011062.64
12	63202.93	81558.01	129041.50	980073.72	991146.66	1011072.94
13	63225.47	81606.46	129072.13	980089.21	991172.45	1011083.25
14	63248.00	81654.93	129102.78	980104.68	991198.24	1011093.56
15	63270.53	81703.43	129133.46	980120.15	991224.03	1011103.88
16	63293.05	81751.95	129164.16	980135.61	991249.81	1011114.20
17	63315.57	81800.47	129194.89	980151.06	991275.59	1011124.53
18	63338.08	81849.05	129225.64	980166.49	991301.37	1011134.87
19	63360.59	81897.61	129256.42	980181.92	991327.14	1011145.21
20	63383.00	81946.25	129287.23	980197.35	991352.91	1011155.56
21	63405.50	81994.8	129318.06	980212.76	991378.68	1011165.92
22	63428.08	82043.5	129348.02	980228.16	991404.44	1011176.28
23	63450.57	82092.2	129379.80	980243.55	991430.20	1011186.65
24	63473.05	82140.93	129410.71	980258.94	991455.96	1011197.02
25	63495.53	82189.66	129441.64	980274.31	991481.71	1011207.40
26	63518.00	82238.40	129472.60	980289.68	991507.47	1011217.79
27	63540.46	82287.18	129503.59	980305.04	991533.22	1011228.1
28	63562.94	82335.0	129534.60	980320.38	991558.96	1011238.58
29	63585.37	82383.79	129565.64	980335.72	991584.71	1011248.98
30	63607.82	82432.64	129596.70	980351.05	991610.45	1011259.39
31	63630.26	82481.51	129627.79	980366.37	991636.18	1011269.81
32	63652.70	82530.40	129658.90	980381.68	991661.92	1011280.23
33	63675.13	82579.31	129690.04	980396.99	991687.65	1011290.66
34	63697.56	82629.25	129721.21	980412.28	991713.38	1011301.10
35	63719.98	82679.21	129752.40	980427.57	991739.11	1011311.54
36	63742.40	82727.19	129783.62	980442.84	991764.83	1011321.99
37	63764.81	82776.20	129814.87	980458.11	991790.55	1011332.44
38	63787.21	82825.23	129846.14	980473.36	991816.27	1011342.90
39	63809.61	82874.29	129877.44	980488.61	991841.98	1011353.37
40	63832.01	82923.37	129908.76	980503.85	991867.69	1011363.84
41	63854.40	82972.47	129940.11	980519.08	991893.40	1011374.32
42	63876.78	83021.60	129971.48	980534.30	991919.11	1011384.81
43	63899.16	83070.75	130002.88	980549.51	991944.81	1011395.30
44	63921.53	83119.02	130034.31	980564.72	991970.51	1011405.80
45	63943.90	83168.12	130065.76	980579.91	991996.21	1011416.30
46	63966.26	83217.34	130097.24	980595.10	992021.91	1011426.81
47	63988.62	83267.59	130128.75	980610.27	992047.60	1011437.33
48	64010.97	83316.86	130160.28	980625.44	992073.29	1011447.85
49	64033.32	83366.15	130191.84	980640.60	992098.98	1011458.38
50	64055.66	83415.47	130223.43	980655.75	992124.66	1011468.91
51	64077.97	83464.81	130255.04	980670.89	992150.34	1011479.45
52	64100.32	83514.18	130286.68	980686.02	992176.02	1011490.00
53	64122.64	83563.57	130318.34	980701.14	992201.70	1011500.55
54	64144.96	83612.98	130350.03	980716.26	992227.37	1011511.11
55	64167.27	83662.42	130381.75	980731.36	992253.04	1011521.68
56	64189.58	83711.88	130413.49	980746.46	992278.71	1011532.25
57	64211.88	83761.36	130445.20	980761.54	992304.37	1011542.83
58	64234.18	83810.87	130477.06	980776.62	992330.04	1011553.41
59	64256.47	83860.40	130508.88	980791.69	992355.70	1011564.01
60	64278.76	83909.96	130540.73	980806.75	992381.35	1011574.60

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
60	77714.60	123489.72	158901.57	989050.26	1009163.08	1020112.82
59	77696.29	123416.29	158844.52	989040.03	1009137.25	1020097.22
58	77677.97	123342.92	158787.52	989029.79	1009111.42	1020081.64
5	77659.65	123269.61	158730.58	989019.54	1009085.60	1020066.06
56	77641.32	123196.34	158673.69	989009.29	1009059.78	1020050.49
55	77622.98	123123.13	158616.85	988999.03	1009033.97	1020034.93
54	77604.64	123049.97	158560.07	988988.77	1009008.15	1020019.38
53	77586.29	122976.87	158503.34	988978.50	1008982.34	1020003.84
52	77567.94	122901.81	158446.67	988968.22	1008956.53	1019988.31
51	77549.58	122830.81	158390.05	988957.94	1008930.73	1019972.79
50	77531.21	122757.86	158333.48	988947.65	1008904.93	1019957.28
49	77512.83	122684.96	158276.97	988937.36	1008879.13	1019941.77
48	77494.45	122612.11	158220.51	988927.06	1008853.34	1019926.28
47	77476.06	122539.32	158164.11	988916.75	1008827.55	1019910.79
46	77457.67	122466.58	158107.76	988906.44	1008801.76	1019895.32
45	77439.27	122393.89	158051.46	988896.12	1008775.97	1019879.85
44	77420.86	122321.25	157995.21	988885.80	1008750.19	1019864.39
43	77402.44	122248.66	157939.02	988875.47	1008724.41	1019848.94
42	77384.02	122176.13	157882.89	988865.13	1008698.63	1019833.51
41	77365.59	122103.64	157826.80	988854.79	1008672.86	1019818.08
40	77347.16	122031.21	157770.77	988844.44	1008647.09	1019802.65
39	77328.72	121958.83	157714.79	988834.08	1008621.32	1019787.24
38	77310.27	121886.50	157658.87	988823.72	1008595.56	1019771.84
37	77291.82	121814.22	157603.00	988813.35	1008569.80	1019756.45
36	77273.36	121741.99	157547.18	988802.98	1008544.04	1019741.06
35	77254.89	121669.82	157491.41	988792.60	1008518.29	1019725.69
34	77236.42	121597.69	157435.70	988782.21	1008492.53	1019710.32
33	77217.94	121525.61	157380.04	988771.82	1008466.78	1019694.96
32	77199.45	121453.59	157324.43	988761.42	1008441.04	1019679.62
31	77180.96	121381.62	157268.87	988751.02	1008415.29	1019664.28
30	77162.46	121309.70	157213.37	988740.61	1008389.55	1019648.95
29	77143.95	121237.83	157157.92	988730.19	1008363.82	1019633.63
28	77125.44	121166.01	157102.52	988719.77	1008338.08	1019618.32
27	77106.92	121094.24	157047.17	988709.34	1008312.35	1019603.01
26	77088.39	121022.52	156991.88	988698.90	1008286.62	1019587.72
25	77069.86	120950.85	156936.64	988688.46	1008260.89	1019572.43
24	77051.32	120879.23	156881.45	988678.01	1008235.17	1019557.16
23	77032.78	120807.67	156826.31	988667.56	1008209.45	1019541.89
22	77014.23	120736.15	156771.23	988657.10	1008183.73	1019526.64
21	76995.67	120664.68	156716.19	988646.63	1008158.02	1019511.39
20	76977.10	120593.27	156661.21	988636.16	1008132.31	1019496.15
19	76958.53	120521.90	156606.28	988625.68	1008106.60	1019480.92
18	76939.95	120450.58	156551.41	988615.19	1008080.89	1019465.70
17	76921.37	120379.31	156496.58	988604.70	1008055.19	1019450.49
16	76902.78	120308.10	156441.81	988594.20	1008029.49	1019435.28
15	76884.18	120236.93	156387.08	988583.70	1008003.79	1019420.09
14	76865.58	120165.81	156332.41	988573.19	1007978.09	1019404.90
13	76846.97	120094.75	156277.79	988562.67	1007952.40	1019389.73
12	76828.35	120023.73	156223.22	988552.15	1007926.71	1019374.56
11	76809.73	119952.76	156168.70	988541.62	1007901.02	1019359.40
10	76791.10	119881.84	156114.24	988531.09	1007875.34	1019344.25
9	76772.46	119810.97	156059.82	988520.55	1007849.66	1019329.11
8	76753.82	119740.15	156005.46	988510.00	1007823.98	1019313.98
7	76735.17	119669.38	155951.15	988499.45	1007798.30	1019298.86
6	76716.51	119598.66	155896.89	988488.89	1007772.63	1019283.74
5	76697.85	119527.99	155842.67	988478.32	1007746.96	1019268.64
4	76679.18	119457.36	155788.51	988467.75	1007721.29	1019253.54
3	76660.51	119386.79	155734.41	988457.17	1007695.63	1019238.46
2	76641.83	119316.26	155680.35	988446.59	1007669.96	1019223.38
1	76623.14	119245.79	155626.34	988435.99	1007644.30	1019208.31
0	76604.44	119175.36	155572.38	988425.40	1007618.65	1019193.25

40	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	64278.76	83909.96	130540.73	980806.75	992381.35	1011574.60
1	64301.04	83959.54	130572.61	980821.80	992407.01	1011585.21
2	64323.32	84009.15	130604.51	980836.84	992432.66	1011595.82
3	64345.59	84058.78	130636.44	980851.88	992458.31	1011606.43
4	64367.85	84108.44	130668.39	980866.90	992483.96	1011617.06
5	64390.11	84158.12	130700.37	980881.92	992509.60	1011627.68
6	64412.36	84207.82	130732.38	980896.92	992535.24	1011638.32
7	64434.61	84257.55	130764.42	980911.92	992560.88	1011648.96
8	64456.85	84307.30	130796.49	980926.91	992586.52	1011659.61
9	64479.09	84357.08	130828.58	980941.89	992612.15	1011670.26
10	64501.32	84406.88	130860.70	980956.86	992637.78	1011680.92
11	64523.55	84456.70	130892.84	980971.82	992663.41	1011691.59
12	64545.77	84506.55	130925.01	980986.78	992689.04	1011702.26
13	64567.98	84556.43	130957.21	981001.72	992714.66	1011712.94
14	64590.19	84606.33	130989.43	981016.66	992740.28	1011723.62
15	64612.40	84656.25	131021.68	981031.59	992765.90	1011734.32
16	64634.60	84706.20	131053.96	981046.50	992791.52	1011745.01
17	64656.79	84756.17	131086.26	981061.41	992817.13	1011755.72
18	64678.98	84806.17	131118.59	981076.31	992842.74	1011766.43
19	64701.16	84856.19	131150.95	981091.21	992868.35	1011777.15
20	64723.34	84906.24	131183.34	981106.09	992893.96	1011787.87
21	64745.51	84956.31	131215.75	981120.96	992919.56	1011798.60
22	64767.67	85006.40	131248.19	981135.83	992945.16	1011809.33
23	64789.83	85056.52	131280.66	981150.69	992970.76	1011820.08
24	64811.99	85106.67	131313.16	981165.54	992996.36	1011830.82
25	64834.14	85156.84	131345.68	981180.38	993021.95	1011841.58
26	64856.28	85207.04	131378.23	981195.21	993047.55	1011852.34
27	64878.42	85257.26	131410.81	981210.05	993073.14	1011863.11
28	64900.55	85307.50	131443.41	981224.84	993098.72	1011873.88
29	64922.68	85357.77	131476.04	981239.65	993124.31	1011884.66
30	64944.80	85408.07	131508.70	981254.44	993149.89	1011895.45
31	64966.92	85458.39	131541.39	981269.23	993175.47	1011906.24
32	64989.03	85508.73	131574.10	981284.01	993201.05	1011917.04
33	65011.14	85559.10	131606.84	981298.78	993226.62	1011927.85
34	65033.24	85609.50	131639.61	981313.54	993252.20	1011938.66
35	65055.33	85659.92	131672.41	981328.29	993277.77	1011949.48
36	65077.42	85710.37	131705.23	981343.03	993303.34	1011960.30
37	65099.50	85760.84	131738.08	981357.77	993328.90	1011971.13
38	65121.58	85811.33	131770.96	981372.50	993354.46	1011981.97
39	65143.66	85861.85	131803.86	981387.21	993380.03	1011992.81
40	65165.72	85912.40	131836.79	981401.92	993405.59	1012003.66
41	65187.78	85962.97	131869.75	981416.62	993431.14	1012014.52
42	65209.84	86013.57	131902.74	981431.31	993456.70	1012025.38
43	65231.89	86064.19	131935.76	981446.00	993482.25	1012036.25
44	65253.94	86114.84	131968.81	981460.67	993507.80	1012047.13
45	65275.98	86165.51	132001.88	981475.34	993533.35	1012058.01
46	65298.01	86216.21	132034.98	981489.99	993558.89	1012068.90
47	65320.04	86266.93	132068.11	981504.64	993584.44	1012079.79
48	65342.06	86317.68	132101.26	981519.28	993609.98	1012090.70
49	65364.08	86368.46	132134.44	981533.91	993635.52	1012101.60
50	65386.09	86419.26	132167.65	981548.54	993661.05	1012112.52
51	65408.10	86470.09	132200.89	981563.15	993686.59	1012123.44
52	65430.10	86520.94	132234.16	981577.76	993712.12	1012134.37
53	65452.09	86571.81	132267.45	981592.35	993737.65	1012145.30
54	65474.08	86622.71	132300.77	981606.94	993763.18	1012156.24
55	65496.06	86673.64	132334.12	981621.52	993788.71	1012167.19
56	65518.04	86724.60	132367.50	981636.09	993814.23	1012178.14
57	65540.01	86775.58	132400.91	981650.66	993839.75	1012189.10
58	65561.98	86826.50	132434.35	981665.21	993865.27	1012200.06
59	65583.94	86877.62	132467.81	981679.75	993890.79	1012211.04
60	65605.90	86928.68	132501.30	981694.29	993916.31	1012222.01

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologarith. pro Tangente	Tomologarith. pro Secante
60	76604.44	119175.36	155572.38	988425.40	1007618.65	1019193.25
59	76585.74	119104.98	155518.48	988414.79	1007592.99	1019178.20
58	76567.03	119034.65	155464.62	988404.18	1007567.34	1019163.16
57	76548.32	118964.37	155410.81	988393.57	1007541.69	1019148.12
56	76529.60	118894.14	155357.06	988382.04	1007516.04	1019133.10
55	76510.87	118823.05	155303.35	988372.32	1007490.40	1019118.08
54	76492.14	118753.82	155249.70	988361.68	1007464.76	1019103.03
53	76473.40	118683.73	155196.09	988351.04	1007439.12	1019088.08
52	76454.65	118613.69	155142.54	988340.39	1007413.48	1019073.03
51	76435.90	118543.70	155089.04	988329.74	1007387.85	1019058.11
50	76417.14	118473.76	155035.58	988319.08	1007362.22	1019043.14
49	76398.37	118403.87	154982.18	988308.41	1007336.59	1019028.18
48	76379.60	118334.02	154928.82	988297.74	1007310.96	1019013.22
47	76360.82	118264.22	154875.52	988287.06	1007285.34	1018998.28
46	76342.04	118194.47	154822.26	988276.38	1007259.72	1018983.34
45	76323.25	118124.77	154769.06	988265.68	1007234.10	1018968.41
44	76304.45	118055.12	154715.90	988254.99	1007208.48	1018953.50
43	76285.64	117985.51	154662.80	988244.28	1007182.87	1018938.59
42	76266.83	117915.95	154609.74	988233.57	1007157.26	1018923.69
41	76248.01	117846.44	154556.73	988222.85	1007131.65	1018908.79
40	76229.19	117776.98	154503.78	988212.13	1007106.04	1018893.91
39	76210.36	117707.56	154450.87	988201.40	1007080.44	1018879.04
38	76191.52	117638.20	154398.01	988190.67	1007054.84	1018864.17
37	76172.68	117568.88	154345.20	988179.92	1007029.24	1018849.31
36	76153.83	117499.60	154292.44	988169.18	1007003.64	1018834.46
35	76134.97	117430.38	154239.73	988158.42	1006978.05	1018819.62
34	76116.11	117361.20	154187.06	988147.66	1006952.45	1018804.79
33	76097.24	117292.07	154134.45	988136.89	1006926.86	1018789.97
32	76078.37	117222.98	154081.89	988126.12	1006901.28	1018775.16
31	76059.49	117153.95	154029.37	988115.34	1006875.69	1018760.35
30	76040.60	117084.96	153976.90	988104.55	1006850.11	1018745.56
29	76021.70	117016.01	153924.49	988093.76	1006824.53	1018730.77
28	76002.80	116947.12	153872.12	988082.96	1006798.95	1018715.99
27	75983.89	116878.27	153819.80	988072.15	1006773.38	1018701.22
26	75964.98	116809.47	153767.52	988061.34	1006747.80	1018686.46
25	75946.06	116740.71	153715.30	988050.52	1006722.23	1018671.71
24	75927.13	116672.00	153663.12	988039.70	1006696.66	1018656.97
23	75908.20	116603.34	153611.00	988028.87	1006671.10	1018642.23
22	75889.26	116534.72	153558.92	988018.03	1006645.54	1018627.50
21	75870.31	116466.15	153506.89	988007.19	1006619.97	1018612.79
20	75851.35	116397.63	153454.91	987996.34	1006594.41	1018598.08
19	75832.40	116329.16	153402.97	987985.48	1006568.86	1018583.38
18	75813.43	116260.73	153351.09	987974.62	1006543.30	1018568.69
17	75794.46	116192.34	153299.25	987963.75	1006517.75	1018554.00
16	75775.48	116124.00	153247.46	987952.87	1006492.20	1018539.33
15	75756.50	116055.71	153195.72	987941.99	1006466.65	1018524.66
14	75737.51	115987.47	153144.03	987931.10	1006441.11	1018510.01
13	75718.51	115919.27	153092.38	987920.21	1006415.56	1018495.36
12	75699.50	115851.11	153040.78	987909.30	1006390.02	1018480.72
11	75680.49	115783.01	152989.23	987898.40	1006364.48	1018466.09
10	75661.47	115714.95	152937.73	987887.48	1006338.95	1018451.46
9	75642.45	115646.93	152886.27	987876.56	1006313.41	1018436.85
8	75623.42	115578.96	152834.87	987865.63	1006287.88	1018422.24
7	75604.39	115511.04	152783.51	987854.70	1006262.35	1018407.65
6	75585.35	115443.16	152732.19	987843.76	1006236.82	1018393.06
5	75566.30	115375.32	152680.93	987832.81	1006211.29	1018378.48
4	75547.24	115307.54	152629.71	987821.86	1006185.77	1018363.91
3	75528.18	115239.79	152578.54	987810.90	1006160.25	1018349.34
2	75509.11	115172.10	152527.41	987799.94	1006134.73	1018334.79
1	75490.04	115104.45	152476.34	987788.96	1006109.21	1018320.25
0	75470.96	115036.84	152425.31	987777.99	1006083.69	1018305.71

41	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	65605.90	86928.68	132501.30	981694.29	993916.31	1012222.01
1	65627.85	86979.76	132534.82	981708.82	993941.82	1012233.00
2	65649.80	87030.87	132568.37	981723.34	993967.33	1012243.99
3	65671.74	87082.00	132601.94	981737.85	993992.84	1012254.99
4	65693.67	87133.16	132635.54	981752.35	994018.35	1012265.99
5	65715.60	87184.35	132669.18	981766.85	994043.85	1012277.00
6	65737.52	87235.56	132702.84	981781.33	994069.36	1012288.02
7	65759.44	87286.82	132736.53	981795.81	994094.86	1012299.04
8	65781.35	87338.06	132770.25	981810.28	994120.36	1012310.07
9	65803.26	87389.35	132803.99	981824.74	994145.85	1012321.11
10	65825.16	87440.67	132837.76	981839.19	994171.35	1012332.15
11	65847.06	87492.01	132871.56	981853.64	994196.84	1012343.20
12	65868.95	87543.38	132905.39	981868.07	994222.33	1012354.26
13	65890.83	87594.78	132939.25	981882.50	994247.82	1012365.32
14	65912.71	87646.20	132973.14	981896.92	994273.31	1012376.39
15	65934.58	87697.65	133007.06	981911.33	994298.79	1012387.47
16	65956.45	87749.12	133041.00	981925.73	994324.28	1012398.55
17	65978.31	87800.62	133074.97	981940.12	994349.76	1012409.64
18	66000.17	87852.15	133108.97	981954.50	994375.24	1012420.73
19	66022.02	87903.70	133143.00	981968.88	994400.72	1012431.84
20	66043.86	87955.28	133177.06	981983.25	994426.19	1012442.94
21	66065.70	88006.89	133211.15	981997.61	994451.66	1012454.06
22	66087.53	88058.52	133245.27	982011.96	994477.14	1012465.18
23	66109.36	88110.18	133279.42	982026.30	994502.61	1012476.31
24	66131.18	88161.86	133313.59	982040.63	994528.07	1012487.44
25	66153.00	88213.57	133347.79	982054.96	994553.54	1012498.58
26	66174.81	88265.31	133382.02	982069.27	994579.00	1012509.73
27	66196.62	88317.07	133416.28	982083.58	994604.47	1012520.88
28	66218.42	88368.86	133450.57	982097.88	994629.93	1012532.05
29	66240.22	88420.68	133484.89	982112.17	994655.39	1012543.21
30	66262.01	88472.53	133519.24	982126.46	994680.84	1012554.39
31	66283.79	88524.42	133553.62	982140.73	994706.30	1012565.57
32	66305.57	88576.30	133588.03	982155.00	994731.75	1012576.75
33	66327.34	88628.22	133622.46	982169.26	994757.20	1012587.95
34	66349.11	88680.17	133656.92	982183.51	994782.65	1012599.15
35	66370.87	88732.15	133691.41	982197.75	994808.10	1012610.35
36	66392.62	88784.16	133725.94	982211.98	994833.55	1012621.56
37	66414.37	88836.20	133760.49	982226.21	994858.99	1012632.78
38	66436.11	88888.26	133795.07	982240.42	994884.43	1012644.01
39	66457.85	88940.34	133829.68	982254.63	994909.87	1012655.24
40	66479.59	88992.45	133864.32	982268.83	994935.31	1012666.48
41	66501.32	89044.59	133898.99	982283.02	994960.75	1012677.73
42	66523.04	89096.75	133933.69	982297.21	994986.19	1012688.98
43	66544.75	89148.94	133968.42	982311.38	995011.62	1012700.24
44	66566.46	89201.16	134003.17	982325.55	995037.05	1012711.51
45	66588.17	89253.41	134037.95	982339.71	995062.48	1012722.78
46	66609.87	89305.69	134072.76	982353.86	995087.91	1012734.06
47	66631.56	89357.99	134107.61	982368.00	995113.34	1012745.34
48	66653.25	89410.32	134142.48	982382.13	995138.76	1012756.63
49	66674.93	89462.68	134177.38	982396.26	995164.19	1012767.93
50	66696.61	89515.06	134212.32	982410.37	995189.61	1012779.24
51	66718.28	89567.47	134247.28	982424.48	995215.03	1012790.55
52	66739.94	89619.91	134282.27	982438.58	995240.45	1012801.87
53	66761.60	89672.38	134317.29	982452.67	995265.87	1012813.19
54	66783.26	89724.87	134352.34	982466.76	995291.28	1012824.52
55	66804.91	89777.39	134387.42	982480.83	995316.70	1012835.86
56	66826.55	89829.94	134422.53	982494.90	995342.11	1012847.21
57	66848.18	89882.52	134457.67	982508.96	995367.52	1012858.56
58	66869.81	89935.12	134492.84	982523.01	995392.93	1012869.92
59	66891.44	89987.75	134528.04	982537.05	995418.34	1012881.28
60	66913.06	90040.41	134563.27	982551.09	995443.74	1012892.65

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409.64
420.73
431.84
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454.06
465.18
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487.44
498.58
509.73
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677.73
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690.24
701.51
712.78
724.06
735.34
746.63
757.93
769.24
780.55
791.87
803.19
814.52
825.86
837.21
848.56
859.92
871.28
882.65

SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
60	75470.96	115036.84	151425.31	987777.99	1006083.69
59	75451.87	114969.23	152374.33	987767.00	1006058.18
58	75432.78	114901.76	153323.39	987756.01	1006032.67
57	75413.68	114834.29	154272.50	987745.01	1006007.16
56	75394.57	114766.87	155221.66	987734.01	1005981.65
55	75375.46	114699.49	156170.87	987723.00	1005956.15
54	75356.34	114632.15	157120.12	987711.98	1005930.64
53	75337.21	114564.86	158069.42	987700.96	1005905.14
52	75318.08	114497.62	159018.76	987689.93	1005879.64
51	75298.94	114430.41	160068.15	987678.89	1005854.15
50	75279.80	114363.26	161017.59	987667.85	1005828.65
49	75260.65	114296.15	162067.08	987656.80	1005803.16
48	75241.49	114229.08	163016.61	987645.74	1005777.67
47	75222.33	114162.06	164066.19	987634.68	1005752.18
46	75203.16	114095.08	165015.81	987623.61	1005726.69
45	75183.98	114028.15	166065.48	987612.53	1005701.21
44	75164.80	113961.26	167015.20	987601.45	1005675.72
43	75145.61	113894.41	168064.96	987590.36	1005650.24
42	75126.41	113827.61	169014.77	987579.27	1005624.76
41	75107.21	113760.85	170064.62	987568.16	1005599.28
40	75088.00	113694.14	171014.52	987557.06	1005573.81
39	75068.79	113627.47	172064.47	987545.94	1005548.34
38	75049.57	113560.85	173014.46	987534.83	1005522.86
37	75030.34	113494.27	174064.50	987523.69	1005497.39
36	75011.11	113427.73	175014.59	987512.56	1005471.93
35	74991.87	113361.24	176064.72	987501.42	1005446.46
34	74972.62	113294.79	177014.89	987490.27	1005421.00
33	74953.37	113228.39	178065.11	987479.12	1005395.53
32	74934.11	113162.03	179015.38	987467.95	1005370.07
31	74914.84	113095.71	180065.69	987456.79	1005344.61
30	74895.57	113029.44	181016.05	987445.61	1005319.16
29	74876.29	112963.21	182066.45	987434.43	1005293.70
28	74857.01	112897.02	183016.90	987423.25	1005268.25
27	74837.72	112830.88	184067.39	987412.05	1005242.80
26	74818.42	112764.79	185017.93	987400.85	1005217.35
25	74799.12	112698.72	186068.52	987389.65	1005191.90
24	74779.81	112632.71	187019.15	987378.44	1005166.45
23	74760.49	112566.74	188069.82	987367.22	1005141.01
22	74741.17	112500.81	189020.54	987356.00	1005115.57
21	74721.84	112434.93	190071.31	987344.76	1005090.13
20	74702.51	112369.09	191022.11	987333.52	1005064.69
19	74683.17	112303.29	192072.97	987322.27	1005039.25
18	74663.83	112237.54	193023.87	987311.02	1005013.81
17	74644.46	112171.83	194074.81	987300.76	1004988.38
16	74625.10	112106.16	195025.80	987289.50	1004962.95
15	74605.74	112040.53	196076.83	987278.22	1004937.52
14	74586.37	111974.95	197027.91	987266.94	1004912.09
13	74566.99	111909.41	198079.03	987255.66	1004886.66
12	74547.60	111843.91	199030.20	987244.37	1004861.24
11	74528.21	111778.46	200081.41	987233.07	1004835.81
10	74508.81	111713.05	201032.67	987221.76	1004810.39
9	74489.40	111647.68	202083.97	987210.45	1004784.97
8	74470.09	111582.35	203035.31	987199.13	1004759.55
7	74450.57	111517.06	204086.70	987187.81	1004734.13
6	74431.15	111451.82	205038.13	987176.48	1004708.72
5	74411.71	111386.62	206089.61	987165.14	1004683.30
4	74392.20	111321.46	207041.13	987153.70	1004657.89
3	74372.85	111256.35	208092.70	987142.44	1004632.48
2	74353.40	111191.27	209044.30	987131.08	1004607.07
1	74333.94	111126.24	210095.96	987119.72	1004581.66
0	74314.48	111061.25	211047.65	987107.35	1004556.26

42	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologariſh. pro Tāgente	Tomologariſh. pro Secante
0	66913.06	90040.41	134563.27	982551.09	995443.74	1012892.65
1	66934.67	90093.09	134598.53	982565.12	995469.15	1012904.03
2	66956.28	90145.80	134633.82	982579.13	995494.55	1012915.42
3	66977.88	90198.54	134669.14	982593.14	995519.95	1012926.81
4	66999.48	90251.31	134704.40	982607.15	995545.35	1012938.21
5	67021.07	90304.11	134739.87	982621.14	995570.75	1012949.61
6	67042.66	90356.94	134775.28	982635.12	995596.15	1012961.02
7	67064.24	90409.79	134810.72	982649.10	995621.54	1012972.44
8	67085.82	90462.67	134846.19	982663.07	995646.94	1012983.87
9	67107.39	90515.58	134881.69	982677.03	995672.33	1012995.30
10	67128.95	90568.51	134917.21	982690.98	995697.73	1013006.74
11	67150.51	90621.47	134952.77	982704.93	995723.11	1013018.18
12	67172.06	90674.46	134988.36	982718.87	995748.50	1013029.63
13	67193.61	90727.48	135023.98	982732.79	995773.89	1013041.09
14	67215.15	90780.53	135059.63	982746.71	995799.27	1013052.56
15	67236.68	90833.60	135095.31	982760.63	995824.65	1013064.03
16	67258.21	90886.71	135131.02	982774.53	995850.04	1013075.51
17	67279.73	90939.84	135166.76	982788.43	995875.42	1013086.99
18	67301.25	90993.00	135202.54	982802.31	995900.80	1013098.48
19	67322.76	91046.19	135238.34	982816.19	995926.18	1013109.98
20	67344.27	91099.41	135274.17	982830.06	995951.55	1013121.49
21	67365.77	91152.65	135310.03	982843.93	995976.93	1013133.00
22	67387.27	91205.92	135345.93	982857.78	996002.30	1013144.52
23	67408.76	91259.22	135381.86	982871.63	996027.67	1013156.04
24	67430.24	91312.55	135417.81	982885.47	996053.05	1013167.58
25	67451.72	91365.91	135453.79	982899.30	996078.42	1013179.12
26	67473.19	91419.29	135489.80	982913.12	996103.78	1013190.66
27	67494.66	91472.70	135525.85	982926.94	996129.15	1013202.21
28	67516.12	91526.15	135561.93	982940.75	996154.52	1013213.77
29	67537.57	91579.62	135598.03	982954.54	996179.88	1013225.34
30	67559.02	91633.12	135634.17	982968.33	996205.25	1013236.91
31	67580.46	91686.65	135670.34	982982.12	996230.61	1013248.48
32	67601.90	91740.20	135706.54	982995.89	996255.97	1013260.09
33	67623.33	91793.79	135742.77	983009.66	996281.33	1013271.67
34	67644.76	91847.40	135779.03	983023.42	996306.69	1013283.27
35	67666.18	91901.04	135815.32	983037.17	996332.04	1013294.88
36	67687.60	91954.71	135851.64	983050.91	996357.40	1013306.49
37	67709.01	92008.41	135888.00	983064.64	996382.75	1013318.11
38	67730.41	92062.14	135924.38	983078.37	996408.11	1013329.74
39	67751.81	92115.90	135960.80	983092.09	996433.46	1013341.37
40	67773.20	92169.68	136007.25	983105.80	996458.81	1013353.01
41	67794.59	92223.50	136053.72	983119.50	996484.16	1013364.66
42	67815.97	92277.34	136070.23	983133.20	996509.51	1013376.31
43	67837.34	92331.22	136106.77	983146.88	996534.86	1013387.97
44	67858.71	92385.12	136143.34	983160.56	996560.20	1013399.64
45	67880.07	92439.05	136179.95	983174.23	996585.55	1013411.32
46	67901.43	92493.01	136216.58	983187.89	996610.89	1013423.00
47	67922.78	92547.00	136253.24	983201.55	996636.23	1013434.69
48	67944.13	92601.01	136289.94	983215.19	996661.57	1013446.38
49	67965.47	92655.06	136326.67	983228.83	996686.92	1013458.08
50	67986.81	92709.14	136363.43	983242.46	996712.25	1013469.79
51	68008.14	92763.24	136400.22	983256.09	996737.59	1013481.51
52	68029.46	92817.38	136437.04	983269.70	996762.93	1013493.23
53	68050.78	92871.54	136473.89	983283.31	996788.27	1013504.96
54	68072.09	92925.73	136510.78	983296.91	996813.60	1013516.69
55	68093.39	92979.96	136547.70	983310.50	996838.93	1013528.44
56	68114.69	93034.21	136584.64	983324.08	996864.27	1013540.19
57	68135.99	93088.49	136621.62	983337.66	996889.60	1013551.94
58	68157.28	93142.80	136658.63	983351.22	996914.93	1013563.71
59	68178.56	93197.14	136695.67	983364.78	996940.26	1013575.48
60	68199.84	93251.51	136732.75	983378.33	996965.59	1013587.25

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarithb. pro Tangente	Tomologarithb. pro Secante
60	74314.48	111061.25	149447.65	987107.35	1004556.26	1017448.91
59	74295.01	110996.30	149399.40	987095.97	1004530.85	1017434.88
58	74275.54	110931.40	149351.18	987084.58	1004505.45	1017420.87
57	74256.06	110866.53	149303.01	987073.19	1004480.05	1017406.86
56	74236.57	110801.71	149254.88	987061.79	1004454.65	1017392.85
55	74217.08	110736.93	149206.80	987050.39	1004429.25	1017378.86
54	74197.58	110672.19	149158.75	987038.08	1004403.85	1017364.88
53	74178.08	110607.50	149110.76	987027.56	1004378.46	1017350.90
52	74158.57	110542.84	149062.80	987016.13	1004353.06	1017336.93
51	74139.05	110478.23	149014.89	987004.70	1004327.67	1017322.97
50	74119.53	110413.65	148967.03	986993.26	1004302.28	1017309.02
49	74100.00	110349.12	148919.20	986981.82	1004276.89	1017295.07
48	74080.46	110284.63	148871.42	986970.37	1004251.50	1017281.13
47	74060.92	110220.19	148823.69	986958.91	1004226.11	1017267.21
46	74041.37	110155.78	148775.90	986947.44	1004200.73	1017253.29
45	74021.81	110091.41	148728.34	986935.97	1004175.35	1017239.37
44	74002.25	110027.09	148680.73	986924.49	1004149.96	1017225.47
43	73982.68	109962.81	148633.17	986913.01	1004124.58	1017211.57
42	73963.11	109898.56	148585.65	986901.52	1004099.20	1017197.69
41	73943.53	109834.36	148538.17	986890.02	1004073.82	1017183.81
40	73923.94	109770.20	148490.73	986878.51	1004048.45	1017169.94
39	73904.35	109706.08	148443.34	986867.00	1004023.07	1017156.07
38	73884.75	109642.01	148395.99	986855.48	1003997.70	1017142.22
37	73865.15	109577.97	148348.68	986843.96	1003972.33	1017128.37
36	73845.54	109513.97	148301.42	986832.42	1003946.95	1017114.53
35	73825.92	109450.02	148254.23	986820.88	1003921.58	1017100.70
34	73806.29	109386.10	148207.02	986809.34	1003896.22	1017086.88
33	73786.66	109322.23	148159.88	986797.79	1003870.85	1017073.06
32	73767.02	109258.40	148112.78	986786.23	1003845.48	1017059.25
31	73747.38	109194.60	148065.73	986774.66	1003820.12	1017045.46
30	73727.73	109130.85	148018.72	986763.09	1003794.75	1017031.67
29	73708.08	109067.14	147971.76	986751.51	1003769.39	1017017.88
28	73688.42	109003.47	147924.83	986739.92	1003744.03	1017004.11
27	73668.75	108939.83	147877.95	986728.33	1003718.67	1016990.34
26	73649.07	108876.24	147831.11	986716.73	1003693.31	1016976.58
25	73629.39	108812.69	147784.31	986705.12	1003667.96	1016962.83
24	73609.71	108749.18	147737.55	986693.51	1003642.60	1016949.09
23	73590.02	108685.71	147690.84	986681.89	1003617.25	1016935.36
22	73570.32	108622.28	147644.17	986670.26	1003591.89	1016921.63
21	73550.61	108558.89	147597.54	986658.63	1003566.54	1016907.91
20	73530.90	108495.54	147550.95	986646.99	1003541.19	1016894.20
19	73511.18	108432.23	147504.40	986635.34	1003515.84	1016880.50
18	73491.46	108368.96	147457.90	986623.69	1003490.49	1016866.80
17	73471.73	108305.73	147411.44	986612.03	1003465.14	1016853.12
16	73451.99	108242.54	147365.01	986600.36	1003439.80	1016839.44
15	73432.25	108179.39	147318.64	986588.68	1003414.45	1016825.77
14	73412.50	108116.28	147272.30	986577.00	1003389.11	1016812.11
13	73392.75	108053.21	147226.00	986565.31	1003363.77	1016798.45
12	73372.99	107990.18	147179.75	986553.62	1003338.43	1016784.81
11	73353.22	107927.18	147133.53	986541.92	1003313.08	1016771.17
10	73333.45	107864.23	147087.36	986530.21	1003287.75	1016757.54
9	73313.67	107801.32	147041.23	986518.49	1003262.41	1016743.91
8	73293.88	107738.44	146995.14	986506.77	1003237.07	1016730.30
7	73274.09	107675.61	146949.20	986495.04	1003211.73	1016716.69
6	73254.29	107612.82	146903.09	986483.31	1003186.40	1016703.09
5	73234.48	107550.06	146857.23	986471.56	1003161.07	1016689.50
4	73214.67	107487.34	146811.20	986459.81	1003135.73	1016675.92
3	73194.85	107424.67	146765.32	986448.06	1003110.40	1016662.34
2	73175.03	107362.03	146719.48	986436.29	1003085.07	1016648.78
1	73155.20	107299.43	146673.68	986424.52	1003059.74	1016635.22
0	73135.37	107236.87	146627.92	986412.75	1003034.41	1016621.67

43	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
0	68199.84	93251.51	136732.75	983378.33	996965.59	1013587.25
1	68221.11	93305.91	136769.85	983391.88	996990.91	1013599.04
2	68242.37	93360.34	136806.99	983405.41	997016.24	1013610.83
3	68263.63	93414.79	136844.16	983418.94	997041.57	1013622.63
4	68284.88	93469.28	136881.36	983432.46	997066.89	1013634.43
5	68306.13	93523.80	136918.59	983445.97	997092.21	1013646.24
6	68327.37	93578.34	136955.86	983459.48	997117.54	1013658.06
7	68348.61	93632.92	136993.15	983472.97	997142.86	1013669.89
8	68369.84	93687.52	137030.48	983486.46	997168.18	1013681.72
9	68391.07	93742.16	137067.84	983499.94	997193.50	1013693.56
10	68412.29	93796.83	137105.23	983513.41	997218.82	1013705.40
11	68433.50	93851.52	137142.66	983526.88	997244.13	1013717.26
12	68454.71	93906.25	137180.11	983540.33	997269.45	1013729.12
13	68475.91	93961.01	137217.60	983553.78	997294.77	1013740.98
14	68497.11	94015.79	137255.12	983567.22	997320.08	1013752.86
15	68518.30	94070.61	137292.68	983580.66	997345.39	1013764.74
16	68539.48	94125.45	137330.26	983594.08	997370.71	1013776.62
17	68560.66	94180.13	137367.88	983607.50	997396.02	1013788.52
18	68581.83	94235.23	137405.53	983620.91	997421.33	1013800.42
19	68603.00	94290.07	137443.21	983634.31	997446.64	1013812.33
20	68624.16	94345.13	137480.92	983647.71	997471.95	1013824.24
21	68645.32	94400.13	137518.67	983661.09	997497.26	1013836.17
22	68666.47	94455.16	137556.45	983674.47	997522.57	1013848.10
23	68687.61	94510.21	137594.26	983687.84	997547.87	1013860.03
24	68708.75	94565.30	137632.10	983701.21	997573.18	1013871.97
25	68729.88	94620.42	137669.98	983714.56	997598.49	1013883.90
26	68751.01	94675.56	137707.80	983727.91	997623.79	1013895.88
27	68772.13	94730.74	137745.83	983741.25	997649.09	1013907.85
28	68793.24	94785.95	137783.80	983754.58	997674.40	1013919.82
29	68814.35	94841.19	137821.81	983767.90	997699.70	1013931.79
30	68835.45	94896.46	137859.85	983781.22	997725.00	1013943.78
31	68856.55	94951.76	137897.92	983794.53	997750.30	1013955.77
32	68877.64	95007.09	137936.02	983807.83	997775.60	1013967.77
33	68898.73	95062.45	137974.16	983821.12	997800.90	1013979.78
34	68919.81	95117.84	138012.33	983834.41	997826.20	1013991.79
35	68940.89	95173.26	138050.53	983847.69	997851.49	1014003.81
36	68961.96	95228.71	138088.77	983860.96	997876.79	1014015.84
37	68983.02	95284.20	138127.04	983874.22	997902.09	1014027.87
38	69004.07	95339.71	138165.34	983887.47	997927.38	1014039.91
39	69025.12	95395.26	138203.67	983900.72	997952.68	1014051.96
40	69046.17	95450.83	138242.04	983913.96	997977.97	1014064.01
41	69067.21	95506.44	138280.44	983927.19	998003.26	1014076.07
42	69088.24	95562.08	138318.87	983940.41	998028.56	1014088.14
43	69109.27	95617.74	138357.34	983953.63	998053.85	1014100.22
44	69130.29	95673.44	138395.84	983966.84	998079.14	1014112.30
45	69151.31	95729.17	138434.37	983980.04	998104.43	1014124.39
46	69172.32	95784.94	138472.94	983993.23	998129.72	1014136.49
47	69193.32	95840.73	138511.64	984006.42	998155.01	1014148.59
48	69214.32	95896.55	138550.17	984019.59	998180.30	1014160.71
49	69235.31	95952.41	138588.83	984032.76	998205.59	1014172.82
50	69256.30	96008.29	138627.53	984045.93	998230.87	1014184.95
51	69277.28	96064.21	138666.26	984059.08	998256.16	1014197.08
52	69298.25	96120.16	138705.03	984072.23	998281.45	1014209.22
53	69319.22	96176.14	138743.83	984085.37	998306.73	1014221.37
54	69340.18	96232.15	138782.66	984098.50	998332.02	1014233.52
55	69361.14	96288.19	138821.53	984111.62	998357.30	1014245.68
56	69382.09	96344.27	138860.42	984124.74	998382.59	1014257.85
57	69403.04	96400.37	138899.36	984137.85	998407.87	1014270.02
58	69423.98	96456.51	138938.32	984150.95	998433.15	1014282.21
59	69444.91	96512.68	138977.32	984164.04	998458.44	1014294.39
60	69465.84	96568.88	139016.36	984177.13	998483.72	1014306.59

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologariſch. pro Tangente	Tomologariſch. pro Secante
60	73135.37	107236.87	146627.92	986412.75	1003034.41	1016621.67
59	73115.53	107174.35	146582.20	986400.96	1003009.09	1016628.12
58	73095.68	107111.87	146536.52	986389.17	1002983.76	1016594.59
57	73075.83	107049.43	146490.88	986377.37	1002958.43	1016581.06
56	73055.97	106987.02	146445.29	986365.57	1002933.11	1016567.54
55	73036.10	106924.66	146399.73	986353.76	1002907.79	1016554.03
54	73016.23	106862.33	146354.22	986341.94	1002882.46	1016540.52
53	72996.35	106800.04	146308.75	986330.11	1002857.14	1016527.03
52	72976.46	106737.79	146263.31	986318.28	1002831.82	1016513.54
51	72956.57	106675.58	146217.92	986306.44	1002806.50	1016500.06
50	72936.67	106613.41	146172.57	986294.60	1002781.18	1016486.59
49	72916.77	106551.28	146127.26	986282.74	1002755.87	1016473.12
48	72896.86	106489.18	146081.98	986270.88	1002730.55	1016459.67
47	72876.94	106427.13	146036.75	986259.02	1002705.23	1016446.22
46	72857.02	106365.11	145991.56	986247.14	1002679.92	1016432.78
45	72837.09	106303.13	145946.41	986235.26	1002654.61	1016419.34
44	72817.16	106241.19	145901.30	986223.38	1002629.29	1016405.92
43	72797.22	106179.29	145856.23	986211.48	1002603.98	1016392.50
42	72777.27	106117.42	145811.20	986199.58	1002578.67	1016379.09
41	72757.32	106055.60	145766.21	986187.67	1002553.36	1016365.69
40	72737.36	105993.81	145721.27	986175.76	1002528.05	1016352.29
39	72717.40	105932.06	145676.36	986163.83	1002502.74	1016338.91
38	72697.43	105870.34	145631.49	986151.90	1002477.43	1016325.53
37	72677.45	105808.67	145586.66	986139.97	1002452.13	1016312.16
36	72657.47	105747.03	145541.87	986128.03	1002426.82	1016298.79
35	72637.48	105685.44	145497.12	986116.08	1002401.51	1016285.44
34	72617.48	105623.88	145452.41	986104.12	1002376.21	1016272.09
33	72597.48	105562.35	145407.74	986092.15	1002350.91	1016258.75
32	72577.47	105500.87	145363.11	986080.18	1002325.60	1016245.42
31	72557.46	105439.42	145318.52	986068.21	1002300.30	1016232.10
30	72537.44	105377.91	145273.97	986056.22	1002275.00	1016218.78
29	72517.41	105316.64	145229.46	986044.23	1002249.70	1016205.47
28	72497.38	105255.31	145184.98	986032.23	1002224.40	1016192.17
27	72477.34	105194.01	145140.55	986020.22	1002199.10	1016178.88
26	72457.29	105132.75	145096.16	986008.21	1002173.80	1016165.59
25	72437.24	105071.53	145051.81	985996.19	1002148.51	1016152.31
24	72417.18	105010.34	145007.49	985984.16	1002123.21	1016139.04
23	72397.12	104949.20	144963.22	985972.13	1002097.91	1016125.78
22	72377.05	104888.09	144918.98	985960.09	1002072.62	1016112.53
21	72356.98	104827.02	144874.78	985948.04	1002047.32	1016099.28
20	72336.90	104765.98	144830.63	985935.99	1002022.03	1016086.04
19	72316.81	104704.98	144786.51	985923.93	1001996.74	1016072.81
18	72296.71	104644.02	144742.43	985911.86	1001971.44	1016059.59
17	72276.61	104583.10	144698.39	985899.78	1001946.15	1016046.37
16	72256.51	104522.21	144654.39	985887.70	1001920.86	1016033.16
15	72236.40	104461.36	144610.43	985875.61	1001895.57	1016019.96
14	72216.28	104400.55	144566.51	985863.51	1001870.28	1016006.77
13	72196.15	104339.77	144522.62	985851.41	1001844.99	1015993.58
12	72176.02	104279.04	144478.78	985839.29	1001819.70	1015980.41
11	72155.88	104218.33	144434.97	985827.18	1001794.41	1015967.24
10	72135.74	104157.67	144391.20	985815.05	1001769.13	1015954.07
9	72115.59	104097.04	144347.48	985802.92	1001743.84	1015940.92
8	72095.44	104036.45	144303.79	985790.78	1001718.55	1015927.77
7	72075.28	103975.89	144260.13	985778.63	1001693.27	1015914.63
6	72055.11	103915.37	144216.52	985766.48	1001667.98	1015901.50
5	72034.94	103854.89	144172.95	985754.32	1001642.70	1015888.38
4	72014.76	103794.45	144129.41	985742.15	1001617.41	1015875.26
3	71994.57	103734.04	144085.91	985729.98	1001592.13	1015862.15
2	71974.38	103673.67	144042.46	985717.79	1001566.85	1015849.05
1	71954.18	103613.33	143999.04	985705.61	1001541.56	1015835.96
0	71933.98	103553.03	143955.65	985693.41	1001516.28	1015822.87

44	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mefologarith. pro Tangente	Tomologarith. pro Secante
0	69465.84	96568.88	139016.36	984177.13	998483.72	1014306.59
1	69486.76	96625.11	139055.43	984190.21	998509.00	1014318.79
2	69507.67	96681.37	139094.51	984203.28	998534.28	1014331.00
3	69528.58	96737.67	139133.66	984216.34	998559.56	1014343.22
4	69549.49	96794.00	139172.83	984229.39	998584.84	1014355.45
5	69570.39	96850.35	139212.01	984242.44	998610.12	1014367.68
6	69591.28	96906.74	139251.27	984255.48	998635.40	1014379.92
7	69612.17	96963.16	139290.54	984268.51	998660.68	1014392.16
8	69633.05	97019.62	139329.85	984281.54	998685.96	1014404.42
9	69653.92	97076.10	139369.18	984294.56	998711.23	1014416.68
10	69674.79	97132.62	139408.56	984307.57	998736.51	1014428.94
11	69695.65	97189.17	139447.96	984320.57	998761.79	1014441.22
12	69716.51	97245.75	139487.40	984333.56	998787.06	1014453.50
13	69737.36	97302.36	139526.88	984346.55	998812.34	1014465.79
14	69758.21	97359.01	139566.39	984359.53	998837.61	1014478.08
15	69779.05	97415.69	139605.91	984372.50	998862.89	1014490.39
16	69799.88	97472.40	139645.51	984385.47	998888.16	1014502.70
17	69820.71	97529.14	139685.12	984398.42	998913.44	1014515.01
18	69841.53	97585.91	139724.77	984411.37	998938.71	1014527.34
19	69862.34	97642.72	139764.45	984424.32	998963.99	1014539.67
20	69883.15	97699.56	139804.16	984437.25	998989.26	1014552.01
21	69903.96	97756.43	139843.61	984450.18	999014.53	1014564.36
22	69924.76	97813.33	139883.69	984463.10	999039.81	1014576.71
23	69945.55	97870.27	139923.51	984476.01	999065.08	1014589.07
24	69966.33	97927.24	139963.36	984488.91	999090.35	1014601.44
25	69987.11	97984.24	140003.25	984501.81	999115.62	1014613.81
26	70007.80	98041.27	140043.17	984514.70	999140.89	1014626.19
27	70028.66	98098.33	140083.13	984527.58	999166.16	1014638.58
28	70049.42	98155.43	140123.12	984540.45	999191.43	1014650.98
29	70070.18	98212.46	140163.15	984553.32	999216.70	1014663.38
30	70090.93	98269.73	140203.21	984566.18	999241.97	1014675.79
31	70111.67	98326.92	140243.30	984579.03	999267.24	1014688.21
32	70132.41	98384.15	140283.43	984591.88	999292.51	1014700.64
33	70153.14	98441.41	140323.60	984604.71	999317.78	1014713.07
34	70173.87	98498.71	140363.80	984617.54	999343.05	1014725.51
35	70194.59	98556.03	140404.03	984630.36	999368.32	1014737.96
36	70215.30	98613.39	140444.30	984643.18	999393.59	1014750.41
37	70236.01	98670.79	140484.60	984655.99	999418.86	1014762.87
38	70256.71	98728.21	140524.94	984668.79	999444.13	1014775.34
39	70277.41	98785.67	140565.32	984681.58	999469.40	1014787.82
40	70298.10	98843.16	140605.73	984694.36	999494.66	1014800.30
41	70318.79	98900.69	140646.17	984707.14	999519.93	1014812.79
42	70339.47	98958.25	140686.65	984719.91	999545.20	1014825.29
43	70360.14	99015.84	140727.17	984732.67	999570.47	1014837.80
44	70380.81	99073.46	140767.72	984745.43	999595.73	1014850.31
45	70401.47	99131.13	140808.31	984758.17	999621.00	1014862.83
46	70422.13	99188.81	140848.91	984770.91	999646.27	1014875.35
47	70442.78	99246.54	140889.58	984783.65	999671.54	1014887.89
48	70463.42	99304.29	140930.28	984796.37	999696.80	1014900.43
49	70484.06	99362.03	140971.00	984809.09	999722.07	1014912.98
50	70504.69	99419.91	141011.77	984821.80	999747.34	1014925.54
51	70525.32	99477.77	141052.56	984834.50	999772.60	1014938.10
52	70545.94	99535.66	141093.40	984847.20	999797.87	1014950.67
53	70566.55	99593.58	141134.27	984859.89	999823.14	1014963.25
54	70587.16	99651.54	141175.17	984872.57	999848.40	1014975.83
55	70607.76	99709.53	141216.11	984885.24	999873.67	1014988.43
56	70628.35	99767.56	141257.00	984897.91	999898.93	1015001.03
57	70648.94	99825.62	141298.10	984910.57	999924.20	1015013.63
58	70669.53	99883.71	141339.15	984923.22	999949.47	1015026.25
59	70690.11	99941.84	141380.24	984935.86	999974.73	1015038.87
60	70710.68	100000.00	141421.36	984948.50	100000.00	1015051.50

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologariſch. pro Tangente	Tomologariſch. pro Secante
60	71933.93	105553.03	143955.65	985603.41	1001516.28	1015822.87
59	71913.77	105492.77	143912.31	985681.21	1001491.00	1015809.79
58	71893.55	105432.54	143869.00	985669.00	1001465.72	1015796.72
57	71873.33	105372.35	143825.74	985656.78	1001440.44	1015783.66
56	71853.10	105312.20	143782.51	985644.55	1001415.16	1015770.61
55	71832.87	105252.08	143739.32	985632.32	1001389.88	1015757.56
54	71812.63	105191.99	143696.16	985620.08	1001364.60	1015744.52
53	71792.38	105131.95	143653.05	985607.84	1001339.32	1015731.49
52	71772.13	105071.04	143609.97	985595.58	1001314.04	1015718.46
51	71751.87	105011.06	143566.93	985583.32	1001288.77	1015705.44
50	71731.61	104952.03	143523.93	985571.06	1001263.49	1015692.43
49	71711.34	104892.12	143480.97	985558.78	1001238.21	1015679.43
48	71691.06	104832.26	143438.05	985546.50	1001212.94	1015666.44
47	71670.78	104772.43	143395.16	985534.21	1001187.66	1015653.45
46	71650.49	104712.63	143352.31	985521.92	1001162.39	1015640.47
45	71630.19	104652.87	143309.50	985509.61	1001137.11	1015627.50
44	71609.89	104593.15	143266.72	985497.30	1001111.84	1015614.53
43	71589.58	104533.46	143223.99	985484.99	1001086.56	1015601.58
42	71569.27	104473.81	143181.29	985472.66	1001061.29	1015588.63
41	71548.95	104414.19	143138.63	985460.33	1001036.01	1015575.68
40	71528.63	104354.61	143096.00	985447.99	1001010.74	1015562.75
39	71508.30	104295.06	143053.42	985435.64	1000985.47	1015549.82
38	71487.96	104235.55	143010.87	985423.29	1000960.19	1015536.90
37	71467.62	104176.08	142968.36	985410.93	1000934.92	1015523.99
36	71447.27	104116.64	142925.88	985398.56	1000909.65	1015511.09
35	71426.91	104057.23	142883.44	985386.19	1000884.38	1015498.19
34	71406.55	104097.86	142841.04	985373.81	1000859.11	1015485.30
33	71386.18	104038.53	142798.68	985361.42	1000833.84	1015472.42
32	71365.81	104079.23	142756.36	985349.02	1000808.57	1015459.55
31	71345.43	104019.07	142714.07	985336.62	1000783.30	1015446.68
30	71325.05	104059.74	142671.82	985324.21	1000758.03	1015433.82
29	71304.66	104000.55	142629.61	985311.79	1000732.76	1015420.97
28	71284.26	103941.39	142587.43	985299.36	1000707.49	1015408.12
27	71263.85	103882.26	142545.29	985286.93	1000682.22	1015395.29
26	71243.44	103823.17	142503.19	985274.49	1000656.95	1015382.46
25	71222.92	103764.12	142461.12	985262.04	1000631.68	1015369.64
24	71202.60	103705.10	142419.09	985249.59	1000606.41	1015356.82
23	71182.17	103646.12	142377.10	985237.13	1000581.14	1015344.01
22	71161.74	103587.17	142335.14	985224.66	1000555.87	1015331.21
21	71141.30	103528.25	142293.23	985212.18	1000530.60	1015318.42
20	71120.86	103469.37	142251.34	985199.70	1000505.34	1015305.64
19	71100.41	103410.53	142209.50	985187.21	1000480.07	1015292.86
18	71079.95	103351.72	142167.69	985174.71	1000454.80	1015280.09
17	71059.48	103292.94	142125.92	985162.20	1000429.53	1015267.33
16	71039.01	103234.20	142084.18	985149.69	1000404.27	1015254.57
15	71018.54	103175.49	142042.48	985137.17	1000379.00	1015241.83
14	70998.06	103116.82	142000.82	985124.65	1000353.73	1015229.09
13	70977.57	103058.18	141959.19	985112.11	1000328.46	1015216.35
12	70957.07	103000.58	141917.61	985099.57	1000303.20	1015203.63
11	70936.57	102942.01	141876.05	985087.02	1000277.93	1015190.91
10	70916.07	102883.47	141834.54	985074.46	1000252.66	1015178.20
9	70895.56	102824.97	141793.05	985061.90	1000227.40	1015165.50
8	70875.04	102766.51	141751.61	985049.33	1000202.13	1015152.80
7	70854.51	102708.07	141710.20	985036.75	1000176.86	1015140.11
6	70833.98	102649.68	141668.83	985024.17	1000151.60	1015127.43
5	70813.45	102591.31	141627.49	985011.57	1000126.33	1015114.76
4	70792.91	102532.98	141586.19	984998.97	1000101.07	1015102.09
3	70772.36	102474.69	141544.93	984986.37	1000075.80	1015089.43
2	70751.80	102416.42	141503.70	984973.75	1000050.53	1015076.78
1	70731.24	102358.19	141462.51	984961.13	1000025.27	1015064.14
0	70710.68	102300.00	141421.36	984948.50	1000000.00	1015051.50

CHILIAS.

Nu.	Logarith. cu differ.	Nu.	Logarith. cu differ.	Nu.	Logarith. cu differ.	Nu.	Logarith. cu differ.	Nu.	Logarith. cu differ.	Nu.	Logarith. cu differ.
0	0	30	147712.13	60	177815.13	90	195424.25	120	207918.12	150	217609.13
1	000000.00	31	1424.04	61	177815.13	91	195424.25	121	207918.12	151	217609.13
2	30123.00	32	1378.83	62	1706.19	92	196378.78	122	208635.98	152	218184.36
3	047712.13	33	151851.39	63	179934.05	93	196848.29	123	208990.51	153	218469.14
4	12493.87	34	153147.89	64	180618.00	94	197312.79	124	209342.17	154	218752.07
5	063206.00	35	154406.80	65	181291.34	95	197772.36	125	209691.00	155	219033.17
6	069897.00	36	155630.25	66	181954.39	96	198227.12	126	210037.05	156	219312.46
7	7918.13	37	156820.17	67	182607.48	97	198677.17	127	210380.37	157	219589.97
8	5799.20	38	157978.36	68	183250.89	98	199122.61	128	210721.00	158	219865.71
9	09309.00	39	159106.46	69	183884.91	99	199563.52	129	211058.97	159	220139.71
10	5115.25	40	160206.00	70	184509.80	100	200000.00	130	211394.34	160	220412.00
11	4139.27	41	161278.39	71	185125.83	101	200432.14	131	211727.13	161	220682.59
12	104139.27	42	162324.93	72	185733.25	102	200860.02	132	212057.30	162	220951.50
13	3778.85	43	163346.85	73	186332.29	103	201283.72	133	212385.16	163	221218.76
14	111394.34	44	164345.27	74	186923.17	104	201703.33	134	212710.48	164	221484.38
15	3218.46	45	165321.25	75	187506.13	105	202118.93	135	213033.38	165	221748.39
16	114612.80	46	166275.78	76	188081.36	106	202530.59	136	213353.89	166	222010.81
17	2996.33	47	167209.79	77	188649.07	107	202938.38	137	213672.06	167	222271.65
18	123044.89	48	168124.12	78	189209.46	108	203342.38	138	213987.91	168	222530.93
19	2482.36	49	169019.61	79	189762.71	109	203742.65	139	214301.48	169	222788.67
20	2348.11	50	169897.00	80	190308.99	110	204139.27	140	214612.80	170	223044.89
21	2227.64	51	170757.02	81	190848.50	111	204532.30	141	214921.91	171	223299.61
22	2118.93	52	171600.33	82	191381.39	112	204921.80	142	215228.83	172	223552.84
23	132221.95	53	172427.59	83	191907.81	113	205307.84	143	215533.60	173	223804.61
24	2020.34	54	173239.38	84	192427.93	114	205690.49	144	215836.25	174	224054.92
25	134242.27	55	174036.27	85	192941.89	115	206069.78	145	216136.80	175	224303.80
26	1930.51	56	174818.80	86	193449.85	116	206445.80	146	216435.29	176	224551.27
27	136172.78	57	175587.49	87	193951.93	117	206818.59	147	216731.73	177	224797.33
28	1848.34	58	176342.80	88	194448.27	118	207188.20	148	217026.17	178	225042.00
29	138021.12	59	177085.20	89	194939.00	119	207554.70	149	217318.63	179	225285.30
30	1772.88	60	177815.13	90	195424.25	120	207918.12	150	217609.13	180	225527.25

Chilias Numerorum abfolutorum ab Unitate vsq ad 1000, cum eorum Logarithmis, ac differentijs.

CHILIAS.

Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.
180	225527.25	210	232221.03	240	238021.12	270	243136.38	300	247712.13	330	251851.39
	240.61		206.32		180.58		160.55		144.52		131.41
181	225767.86	211	232428.25	241	238201.72	271	243206.93	301	247856.65	331	251982.80
	239.28		205.34		179.84		159.96		144.04		131.01
182	226007.14	212	232633.59	242	238381.54	272	243456.89	302	248000.69	332	252113.81
	237.97		204.37		179.09		159.37		143.57		130.61
183	226245.11	213	232837.96	243	238560.63	273	243616.26	303	248144.26	333	252244.42
	236.67		203.42		178.35		158.80		143.10		130.23
184	226481.78	214	233041.38	244	238738.98	274	243775.06	304	248287.36	334	252374.65
	235.39		202.47		177.63		158.21		142.62		129.83
185	226717.17	215	233243.85	245	238916.61	275	243933.27	305	248429.98	335	252504.48
	234.12		201.51		176.90		157.64		142.16		129.45
186	226951.29	216	233445.38	246	239093.51	276	244090.91	306	248572.14	336	252633.93
	232.87		200.59		176.19		157.07		141.70		129.06
187	227184.16	217	233645.97	247	239269.70	277	244247.95	307	248713.84	337	252762.99
	231.62		199.68		175.47		156.50		141.23		128.68
188	227415.78	218	233845.65	248	239445.17	278	244404.48	308	248855.07	338	252891.67
	230.40		198.76		174.76		155.94		140.78		128.30
189	227646.18	219	234044.41	249	239619.93	279	244560.42	309	248995.85	339	253019.97
	229.18		197.86		174.07		155.38		140.32		127.92
190	227875.36	220	234242.27	250	239794.00	280	244715.80	310	249136.17	340	253147.89
	227.98		196.96		173.37		154.83		139.87		127.55
191	228103.34	221	234439.23	251	239967.37	281	244870.63	311	249276.04	341	253275.44
	226.78		196.07		172.68		154.28		139.42		127.17
192	228330.12	222	234635.30	252	240140.05	282	245024.91	312	249415.46	342	253402.61
	225.01		195.19		172.00		153.73		138.97		126.80
193	228555.73	223	234830.49	253	240312.05	283	245178.64	313	249554.43	343	253529.41
	224.44		194.31		171.32		153.10		138.53		126.43
194	228780.17	224	235024.80	254	240483.37	284	245331.83	314	249692.96	344	253655.84
	223.29		193.43		170.64		152.66		138.10		126.07
195	229003.46	225	235218.25	255	240654.01	285	245484.49	315	249831.06	345	253781.91
	222.15		192.59		169.99		152.11		137.65		125.70
196	229225.61	226	235410.84	256	240824.00	286	245636.60	316	249968.71	346	253907.61
	221.01		191.75		169.31		151.59		137.22		125.34
197	229446.62	227	235602.59	257	240993.31	287	245788.10	317	250105.93	347	254032.95
	219.90		190.39		168.66		151.06		136.78		124.97
198	229666.52	228	235798.48	258	241161.97	288	245939.25	318	250242.71	348	254157.92
	218.79		190.07		168.01		150.53		136.36		124.62
199	229885.31	229	235983.55	259	241329.98	289	246089.38	319	250379.07	349	254282.54
	217.69		189.23		167.35		150.03		135.93		124.26
200	230103.00	230	236172.78	260	241497.33	290	246239.80	320	250515.00	350	254406.80
	216.61		188.42		166.72		149.50		135.50		123.91
201	230319.61	231	236361.20	261	241664.05	291	246381.30	321	250650.50	351	254530.71
	215.53		187.60		166.08		148.90		135.09		123.56
202	230535.14	232	236548.80	262	241830.13	292	246538.29	322	250785.59	352	254654.27
	214.46		186.79		165.44		148.47		134.66		123.20
203	230749.60	233	236735.59	263	241995.57	293	246686.76	323	250920.25	353	254777.47
	213.42		186.00		164.82		147.97		134.25		122.86
204	230963.02	234	236921.59	264	242160.39	294	246854.73	324	251054.50	354	254900.33
	212.37		185.20		164.20		147.47		133.84		122.51
205	231175.39	235	237106.79	265	242324.59	295	246982.20	325	251188.34	355	255022.84
	211.33		184.41		163.57		146.97		133.42		122.16
206	231386.72	236	237291.20	266	242488.16	296	247129.17	326	251321.76	356	255145.00
	210.31		183.63		162.97		146.47		133.02		121.82
207	231597.03	237	237474.83	267	242651.13	297	247275.64	327	251454.78	357	255266.82
	209.30		182.87		162.35		145.99		132.60		121.48
208	231806.33	238	237657.70	268	242813.48	298	247421.63	328	251587.38	358	255388.30
	208.30		182.09		161.75		145.49		132.21		121.14
209	232014.63	239	237839.79	269	242975.23	299	247567.12	329	251719.59	359	255509.44
	207.30		181.33		161.15		145.01		131.80		120.81
210	232221.03	240	238021.12	270	243136.38	300	247712.13	330	251851.39	360	255630.25

Chilias Numerorum absolutorum ab Unitate vsq; ad 1000, cum eorum Logarithmis, ac differentijs.

C H I L I A S.

Nu.	Logarith. cū differ.	Nu.	Logarith. cū differ.	Nu.	Logarith. cū differ.	Nu.	Logarith. cū differ.	Nu.	Logarith. cū differ.	Nu.	Logarith. cū differ.
360	255630.25	390	259106.46	420	262324.03	450	265321.25	480	268124.12	510	270757.02
361	120.47	391	111.22	421	103.28	451	96.40	481	90.30	511	85.07
362	255750.72	392	259217.68	422	262428.21	452	265417.65	482	268214.51	512	270842.09
363	110.14	393	110.93	423	103.04	453	96.19	483	90.19	513	84.91
364	255870.86	394	259328.61	424	262531.25	454	265513.84	484	268304.70	514	270927.00
365	119.80	395	110.65	425	102.79	455	95.98	485	90.01	515	84.74
366	255990.66	396	259439.26	426	262634.04	456	265609.82	486	268394.71	516	271011.74
367	119.48	397	110.36	427	102.55	457	95.77	487	89.83	517	84.57
368	256110.14	398	259549.62	428	262736.59	458	265705.59	488	268484.54	518	271096.31
369	119.15	399	110.09	429	102.30	459	95.55	489	89.63	519	84.41
370	256229.29	400	259659.71	430	262838.89	460	265801.14	490	268574.17	520	271180.72
371	118.82	401	109.81	431	102.07	461	95.34	491	89.46	521	84.25
372	256348.11	402	259769.52	432	262940.96	462	265896.48	492	268663.63	522	271264.97
373	118.50	403	109.53	433	101.83	463	95.14	493	89.27	523	84.08
374	256466.61	404	259879.05	434	263042.79	464	265991.62	494	268752.90	524	271349.05
375	118.17	405	109.26	435	101.59	465	94.93	495	89.08	525	83.93
376	256584.78	406	259988.31	436	263144.38	466	266086.55	496	268841.08	526	271432.98
377	117.85	407	108.98	437	101.35	467	94.72	497	88.91	527	83.76
378	256702.63	408	260097.29	438	263245.73	468	266181.27	498	268930.89	528	271516.74
379	117.54	409	108.71	439	101.12	469	94.51	499	88.72	529	83.59
380	256820.17	410	260206.00	440	263346.85	470	266275.78	500	269019.61	530	271600.33
381	117.22	411	108.44	441	100.88	471	94.31	501	88.54	531	83.44
382	256937.39	412	260314.44	442	263447.73	472	266370.09	502	269108.15	532	271683.77
383	116.90	413	108.17	443	100.64	473	94.11	503	88.36	533	83.28
384	257054.29	414	260422.61	444	263548.37	474	266464.20	504	269196.51	534	271767.05
385	116.59	415	107.89	445	100.42	475	93.90	505	88.18	535	83.12
386	257170.88	416	260530.50	446	263648.79	476	266558.10	506	269284.69	536	271850.17
387	116.28	417	107.64	447	100.18	477	93.70	507	88.00	537	82.96
388	257287.16	418	260638.14	448	263748.97	478	266651.80	508	269372.69	538	271933.13
389	115.97	419	107.36	449	99.96	479	93.50	509	87.83	539	82.80
390	257403.13	420	260748.50	450	263848.93	480	266745.30	510	269460.52	540	272015.93
391	115.65	421	107.10	451	99.72	481	93.29	511	87.65	541	82.64
392	257518.78	422	260852.60	452	263948.65	482	266838.59	512	269548.17	542	272098.57
393	115.36	423	106.84	453	99.49	483	93.10	513	87.47	543	82.49
394	257634.14	424	260959.44	454	264048.14	484	266931.69	514	269635.64	544	272181.06
395	115.04	425	106.58	455	99.27	485	92.90	515	87.29	545	82.33
396	257749.18	426	261066.02	456	264147.41	486	267024.59	516	269722.93	546	272263.39
397	114.74	427	106.31	457	99.04	487	92.69	517	87.12	547	82.18
398	257863.92	428	261172.33	458	264246.45	488	267117.18	518	269810.05	548	272345.57
399	114.44	429	106.06	459	98.82	489	92.51	519	86.95	549	82.02
400	257978.36	430	261278.39	460	264345.27	490	267209.79	520	269897.00	550	272427.59
401	114.14	431	105.79	461	98.59	491	92.30	521	86.77	551	81.86
402	258092.50	432	261384.18	462	264443.86	492	267302.09	522	269983.77	552	272509.45
403	113.84	433	105.54	463	98.37	493	92.11	523	86.60	553	81.71
404	258206.34	434	261490.72	464	264542.23	494	267394.20	524	270070.37	554	272591.16
405	113.54	435	105.29	465	98.14	495	91.91	525	86.43	555	81.56
406	258317.88	436	261595.01	466	264640.37	496	267486.11	526	270156.80	556	272672.72
407	113.24	437	105.03	467	97.93	497	91.72	527	86.25	557	81.41
408	258433.12	438	261700.03	468	264738.50	498	267577.83	528	270243.05	558	272754.13
409	112.95	439	104.73	469	97.70	499	91.53	529	86.09	559	81.25
410	258546.07	440	261804.81	470	264835.00	500	267669.36	530	270329.14	560	272835.58
411	112.66	441	104.52	471	97.49	501	91.34	531	85.91	561	81.00
412	258658.73	442	261909.33	472	264933.40	502	267760.70	532	270415.05	562	272916.48
413	112.37	443	104.28	473	97.26	503	91.14	533	85.75	563	80.95
414	258771.10	444	262013.61	474	265030.75	504	267851.84	534	270500.80	564	272997.43
415	112.07	445	104.02	475	97.05	505	90.95	535	85.57	565	80.80
416	258883.17	446	262117.63	476	265127.80	506	267942.70	536	270586.37	566	273078.23
417	111.79	447	103.77	477	96.83	507	90.76	537	85.41	567	80.65
418	258994.96	448	262221.40	478	265224.63	508	268033.55	538	270671.78	568	273158.38
419	111.50	449	103.53	479	96.62	509	90.57	539	85.24	569	80.50
420	259106.46	450	262324.03	480	265321.25	510	268124.12	540	270757.02	570	273239.38

Chilias Numerorum ab uno usque ad 1000, cum eorum Logarithmis, ac differentijs.

C H I L I A S.

Nu.	Logarith. cū differ.	Nu.	Logarith. cū differ.	Nu.	Logarith. cū differ.	Nu.	Logarith. cū differ.	Nu.	Logarith. cū differ.	Nu.	Logarith. cū differ.
540	273230.58 80.35	570	275587.49 76.12	600	277815.13 72.32	630	279934.05 68.89	660	281954.39 65.76	690	283884.91 62.89
541	273319.73 80.20	571	275663.61 75.99	601	277887.45 72.20	631	280002.94 68.77	661	282020.15 65.65	691	283947.80 62.81
542	273399.93 80.05	572	275739.60 75.86	602	277959.63 72.08	632	280071.71 68.66	662	282085.80 65.55	692	284010.61 62.71
543	273479.98 79.01	573	275815.46 75.73	603	278031.73 71.96	633	280140.37 68.56	663	282151.35 65.46	693	284073.32 62.63
544	273559.89 79.76	574	275891.19 75.59	604	278103.69 71.85	634	280208.93 68.45	664	282216.81 65.35	694	284135.95 62.53
545	273639.65 79.61	575	275966.78 75.47	605	278175.54 71.72	635	280277.37 68.34	665	282282.16 65.26	695	284198.48 62.44
546	273719.26 79.47	576	276042.25 75.33	606	278247.26 71.61	636	280345.71 68.23	666	282347.42 65.16	696	284260.92 62.36
547	273798.73 79.33	577	276117.58 75.20	607	278318.87 71.49	637	280413.94 68.11	667	282412.58 65.07	697	284323.28 62.26
548	273878.06 79.17	578	276192.78 75.08	608	278390.36 71.37	638	280482.07 68.02	668	282477.65 64.96	698	284385.54 62.18
549	273957.23 79.04	579	276267.86 74.94	609	278461.73 71.25	639	280550.09 67.91	669	282542.61 64.87	699	284447.72 62.08
550	274036.27 78.89	580	276342.80 74.81	610	278532.98 71.14	640	280618.00 67.80	670	282607.48 64.77	700	284509.80 61.00
551	274115.16 78.75	581	276417.61 74.69	611	278604.12 71.02	641	280685.30 67.70	671	282672.25 64.68	701	284571.80 61.91
552	274193.91 78.60	582	276492.30 74.56	612	278675.14 70.91	642	280753.50 67.60	672	282736.93 64.58	702	284633.71 61.82
553	274272.51 78.47	583	276566.86 74.42	613	278746.05 70.79	643	280821.10 67.49	673	282801.51 64.48	703	284695.53 61.74
554	274350.98 78.32	584	276641.28 74.28	614	278816.84 70.67	644	280888.59 67.38	674	282865.99 64.39	704	284757.27 61.64
555	274429.30 78.18	585	276715.59 74.17	615	278887.51 70.56	645	280955.97 67.28	675	282930.38 64.29	705	284818.91 61.56
556	274507.48 78.04	586	276789.76 74.05	616	278958.07 70.45	646	281023.25 67.18	676	282994.67 64.20	706	284880.47 61.47
557	274585.52 77.90	587	276863.81 73.92	617	279028.52 70.33	647	281090.43 67.07	677	283058.87 64.10	707	284941.94 61.39
558	274663.42 77.76	588	276937.73 73.80	618	279098.85 70.21	648	281157.50 66.97	678	283122.97 64.01	708	285003.33 61.29
559	274741.18 77.62	589	277011.53 73.67	619	279169.06 70.11	649	281224.47 66.87	679	283186.98 63.91	709	285064.62 61.21
560	274818.80 77.49	590	277085.20 73.55	620	279239.17 69.99	650	281291.34 66.76	680	283250.89 63.82	710	285125.85 61.13
561	274896.29 77.34	591	277158.75 73.42	621	279309.16 69.88	651	281358.10 66.66	681	283314.71 63.73	711	285186.96 61.04
562	274973.63 77.21	592	277232.17 73.30	622	279379.04 69.76	652	281424.76 66.56	682	283378.44 63.63	712	285248.00 60.95
563	275050.84 77.07	593	277305.47 73.17	623	279448.80 69.66	653	281491.32 66.45	683	283442.07 63.54	713	285308.95 60.87
564	275127.91 76.93	594	277378.64 73.06	624	279518.46 69.54	654	281557.77 66.36	684	283505.61 63.45	714	285369.82 60.78
565	275204.84 76.80	595	277451.70 72.93	625	279588.00 69.43	655	281624.13 66.25	685	283569.06 63.35	715	285430.60 60.70
566	275281.64 76.67	596	277524.63 72.80	626	279657.43 69.32	656	281690.38 66.16	686	283632.41 63.26	716	285491.30 60.62
567	275358.31 76.52	597	277597.43 72.69	627	279726.75 69.21	657	281756.54 66.05	687	283695.67 63.17	717	285551.92 60.52
568	275434.83 76.40	598	277670.12 72.56	628	279795.96 69.10	658	281822.59 65.95	688	283758.84 63.08	718	285612.44 60.45
569	275511.23 76.26	599	277742.68 72.45	629	279865.06 68.99	659	281888.54 65.85	689	283821.92 62.99	719	285672.89 60.36
570	275587.49	600	277815.13	630	279934.05	660	281954.39	690	283884.91	720	285733.25

Chilias Numerorum ab Unitate vsq; ad 1000, cum eorum Logarithmis, ac differentiis.

C H I L I A S.

Nu.	Logarith. cu differ.	Nu.	Logarith. cu differ.	Nu.	Logarith. cu differ.	Nu.	Logarith. cu differ.	Nu.	Logarith. cu differ.	Nu.	Logarith. cu differ.
720	285733.25 60.28	750	287506.13 57.86	780	289209.46 55.64	810	290848.50 53.59	840	292427.93 51.67	870	293951.93 49.89
721	285793.53 60.19	751	287563.99 57.79	781	289265.10 55.58	811	290901.09 53.51	841	292479.60 51.61	871	294001.82 49.83
722	285853.72 60.11	752	287621.78 57.72	782	289320.68 55.50	812	290955.60 53.45	842	292531.21 51.55	872	294051.65 49.77
723	285913.83 60.03	753	287679.50 57.63	783	289376.18 55.43	813	291009.05 53.39	843	292582.76 51.48	873	294101.42 49.72
724	285973.86 59.94	754	287737.13 57.57	784	289431.61 55.36	814	291062.44 53.32	844	292634.24 51.43	874	294151.14 49.67
725	286033.80 59.86	755	287794.70 57.48	785	289486.97 55.28	815	291115.76 53.26	845	292685.67 51.37	875	294200.81 49.60
726	286093.66 59.78	756	287852.18 57.41	786	289542.25 55.22	816	291169.02 53.19	846	292737.04 51.30	876	294250.41 49.55
727	286153.44 59.70	757	287909.59 57.33	787	289597.47 55.15	817	291222.21 53.12	847	292788.34 51.25	877	294299.96 49.49
728	286213.14 59.61	758	287966.92 57.26	788	289652.62 55.08	818	291275.33 53.06	848	292839.59 51.18	878	294349.45 49.44
729	286272.75 59.54	759	288024.18 57.18	789	289707.70 55.01	819	291328.31 53.00	849	292890.77 51.12	879	294398.89 49.38
730	286332.29 59.45	760	288081.36 57.11	790	289762.71 54.94	820	291381.31 52.93	850	292941.89 51.07	880	294448.27 49.32
731	286391.74 59.37	761	288138.47 57.03	791	289817.65 54.87	821	291434.32 52.86	851	292992.96 51.00	881	294497.59 49.27
732	286451.11 59.29	762	288195.50 56.95	792	289872.52 54.80	822	291487.18 52.80	852	293043.96 50.94	882	294546.86 49.21
733	286510.40 59.21	763	288252.45 56.89	793	289927.32 54.73	823	291539.98 52.74	853	293094.90 50.88	883	294596.07 49.16
734	286569.61 59.12	764	288309.34 56.80	794	289982.05 54.66	824	291592.72 52.67	854	293145.79 50.82	884	294645.23 49.10
735	286628.73 59.05	765	288366.14 56.74	795	290036.71 54.60	825	291645.39 52.61	855	293196.61 50.77	885	294694.33 49.04
736	286687.78 58.97	766	288422.88 56.66	796	290091.31 54.52	826	291698.00 52.55	856	293247.38 50.70	886	294743.37 48.99
737	286746.75 58.89	767	288479.54 56.58	797	290145.83 54.46	827	291750.55 52.48	857	293298.08 50.65	887	294792.36 48.94
738	286805.64 58.80	768	288536.12 56.51	798	290200.29 54.39	828	291803.03 52.42	858	293348.73 50.59	888	294841.30 48.88
739	286864.44 58.73	769	288592.63 56.44	799	290254.68 54.32	829	291855.45 52.36	859	293399.32 50.53	889	294890.18 48.82
740	286923.17 58.65	770	288649.07 56.37	800	290309.00 54.25	830	291907.81 52.29	860	293449.85 50.47	890	294939.00 48.77
741	286981.82 58.57	771	288705.44 56.29	801	290363.25 54.19	831	291960.10 52.23	861	293500.32 50.41	891	294987.77 48.72
742	287040.39 58.49	772	288761.73 56.22	802	290417.44 54.11	832	292012.33 52.17	862	293550.73 50.35	892	295036.49 48.66
743	287098.88 58.41	773	288817.95 56.15	803	290471.55 54.05	833	292064.50 52.11	863	293601.08 50.29	893	295085.15 48.60
744	287157.29 58.34	774	288874.10 56.07	804	290525.60 53.99	834	292116.61 52.04	864	293651.37 50.24	894	295133.75 48.55
745	287215.63 58.25	775	288930.17 56.00	805	290579.59 53.91	835	292168.65 51.98	865	293701.61 50.18	895	295182.20 48.50
746	287273.88 58.18	776	288986.17 55.93	806	290633.50 53.85	836	292220.63 51.92	866	293751.79 50.12	896	295230.80 48.44
747	287332.06 58.10	777	289042.10 55.86	807	290687.35 53.79	837	292272.55 51.85	867	293801.91 50.06	897	295279.24 48.39
748	287390.16 58.02	778	289097.96 55.79	808	290741.14 53.71	838	292324.40 51.80	868	293851.97 50.01	898	295327.63 48.34
749	287448.18 57.95	779	289153.75 55.71	809	290794.85 53.65	839	292376.20 51.73	869	293901.98 49.95	899	295375.97 48.28
750	287506.13 57.86	780	289209.46 55.64	810	290848.50 53.59	840	292427.93 51.67	870	293951.93 49.89	900	295424.25 48.22

Chilias Numerorum absolutorum ab Unitate vsq; ad 1000, cum eorum Logarithmis, ac differentijs.

C H I L I A S.

Nu.	Logarith. cū differ.	Nu.	Logarith. cū differ.	Nu.	Logarith. cū differ.	Nu.	Logarith. cū differ.	Nu.	Logarith. cū differ.	Nu.	Logarith. cū differ.
900	295424.25	917	296236.93	934	297034.69	951	297818.05	968	298587.54	985	299343.62
	48.23		47.34		46.47		45.64		44.84		44.07
901	295472.48	918	296284.27	935	297081.16	952	297863.69	969	298632.38	986	299387.69
	48.17		47.28		46.42		45.60		44.79		44.03
902	295520.65	919	296331.55	936	297127.58	953	297909.29	970	298677.17	987	299431.72
	48.12		47.23		46.38		45.55		44.75		43.97
903	295568.77	920	296378.78	937	297173.96	954	297954.84	971	298721.92	988	299475.69
	48.07		47.18		46.32		45.50		44.71		43.94
904	295616.84	921	296425.96	938	297220.28	955	298000.34	972	298766.63	989	299519.63
	48.02		47.13		46.28		45.45		44.65		43.89
905	295664.86	922	296473.09	939	297266.56	956	298045.79	973	298811.28	990	299563.52
	47.96		47.08		46.23		45.40		44.62		43.85
906	295712.82	923	296520.17	940	297312.79	957	298091.19	974	298855.90	991	299607.37
	47.91		47.03		46.17		45.36		44.56		43.80
907	295760.73	924	296567.20	941	297358.96	958	298136.55	975	298900.46	992	299651.17
	47.85		46.97		46.13		45.31		44.52		43.75
908	295808.58	925	296614.17	942	297405.09	959	298181.86	976	298944.98	993	299694.92
	47.81		46.93		46.08		45.26		44.48		43.72
909	295856.39	926	296661.10	943	297451.17	960	298227.12	977	298989.46	994	299738.64
	47.75		46.87		46.03		45.22		44.43		43.67
910	295904.14	927	296707.97	944	297497.20	961	298272.34	978	299033.89	995	299782.31
	47.70		46.83		45.98		45.17		44.38		43.62
911	295951.84	928	296754.80	945	297543.18	962	298317.51	979	299078.27	996	299825.93
	47.64		46.77		45.93		45.13		44.34		43.59
912	295999.48	929	296801.57	946	297589.11	963	298362.63	980	299122.61	997	299869.52
	47.60		46.72		45.89		45.07		44.29		43.53
913	296047.08	930	296848.29	947	297635.00	964	298407.70	981	299166.90	998	299913.05
	47.54		46.68		45.83		45.03		44.25		43.50
914	296094.62	931	296894.07	948	297680.83	965	298452.73	982	299211.15	999	299956.55
	47.49		46.62		45.79		44.98		44.20		43.45
915	296142.11	932	296941.59	949	297726.62	966	298497.71	983	299255.35	1000	300000.00
	47.44		46.57		45.74		44.94		44.16		
916	296189.55	933	296988.16	950	297772.36	967	298542.65	984	299299.51		
	47.38		46.53		45.69		44.89		44.11		
917	296236.93	934	297034.69	951	297818.05	968	298587.54	985	299343.62		

Chilias Numerorum abfolutorum ab Unitate vsq; ad 1000, cum eorum Logarithmis, ac differentijs.

F I N I S C H I L I A D I S.



Facultas Reuerendiss. P. Generalis.

CUm Trigonometriam à Reu. P. Bonauentura Caualerio Mediolanensi Ordinis Iesuatorum Sancti Hieronymi constructam duo eiusdem Ordinis recognouerint, & typis mandari posse iudicauerint: Nos permittimus vt imprimatur; si ijs, ad quos spectat, ita visum fuerit.

Bononiæ die 21. Nouembris 1642.

Fr. Io. Paulus ab Hamilitate Generalis.

CUm ego infra scriptus Librorum Cenfor pro Eminentiss. & Reuerendiss. D. D. Principe Card. Columna Bonon. Archiepiscopo Trigonometriam hanc Adm. Reu. P. Bonauenturae Caualerij in Almo Bononienfi Archigymnasio excellentiss. Mathematicarum Professoris accuratè perlustrassem, nihil censurae obnoxium deprehendens, admiratus sum solita tanti, ac incomparabilis viri in hac facultate miracula. Quare eam, quæ summum in Mathematicorum commodum publici iuris fiat, dignissimam censeo.

Dat. Bonon. in Collegio nostro Pœnitent. die 29. Nouemb. An. 1642.

D. Ludouicus Modronus Sac. Bononien. Pœnit. Rector.

Accuratè perlegi opus Trigonometriæ compositum ab Adm. Reu. P. Bonauentura Caualerio in Almo Bononien. Archigymnasio Scientiarum Mathematicarum Professore; nihilq; quod Fidei Catholicæ, bonisq; moribus repugnet reperi, & ideo dignum typis dari censeo.

Ego Frat. Dominicus de Manfredis Doct. Colleg. ac Sanctiss. Inquisit. Consult. pro Reuerendiss. P. Inq. Bonon.



B O N O N I A E,

Typis Hæredis Victorij Benatij. 1643. Superiorum permissu.

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FIGURA TRIGONOMETRIÆ PLANÆ.

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FIGURA TRIGONOMETRIÆ SPHÆRICÆ.

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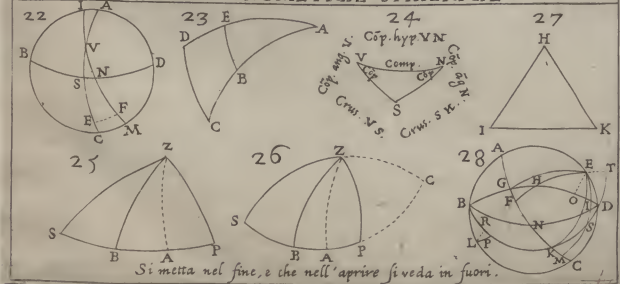
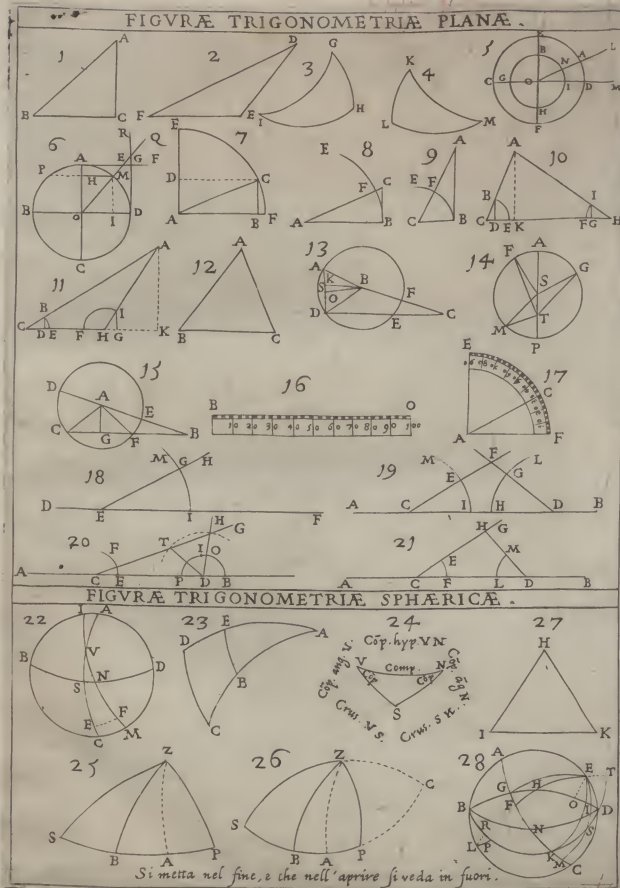
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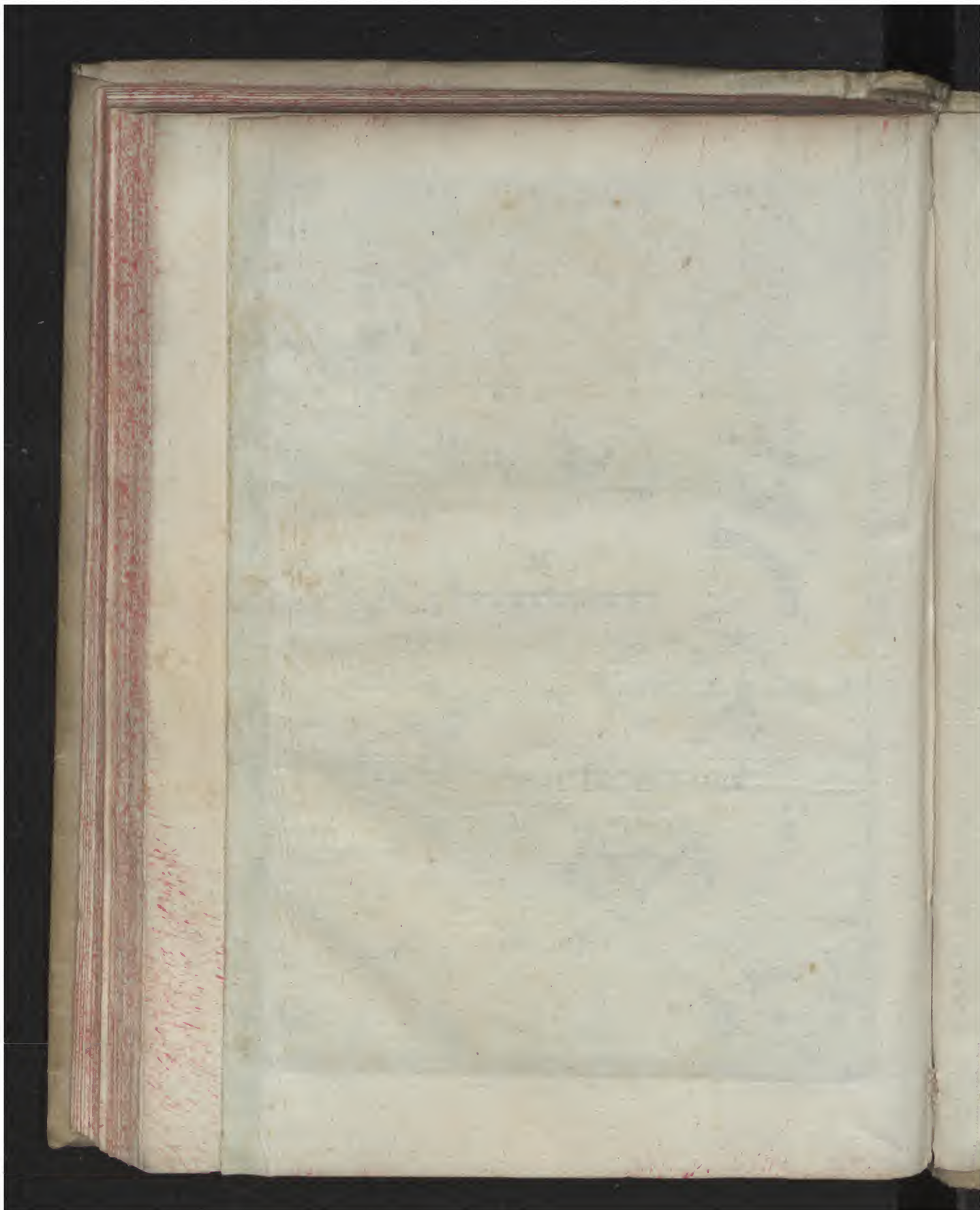
28

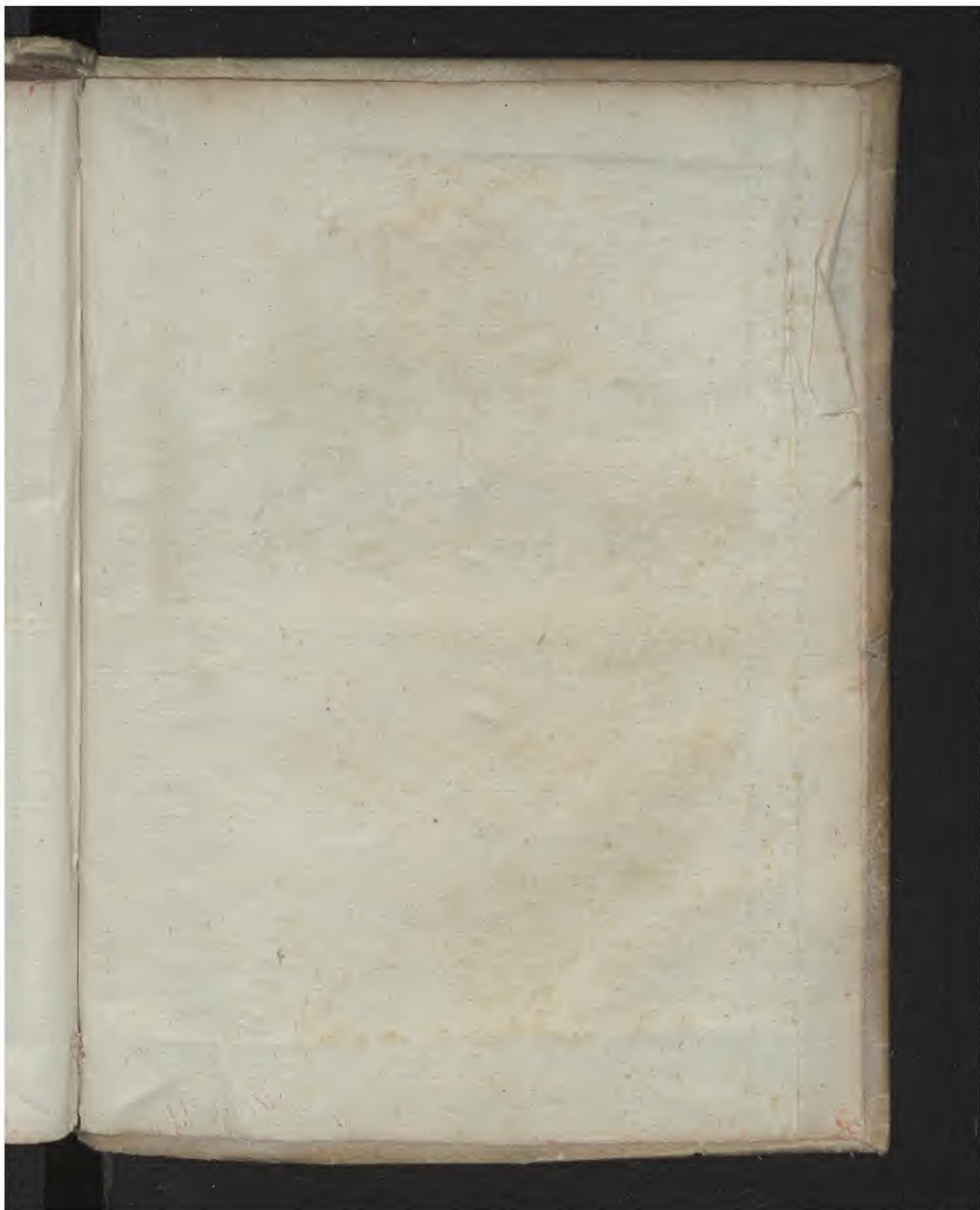
Si metta nel fine, e che nell'aprire si veda in fuori.

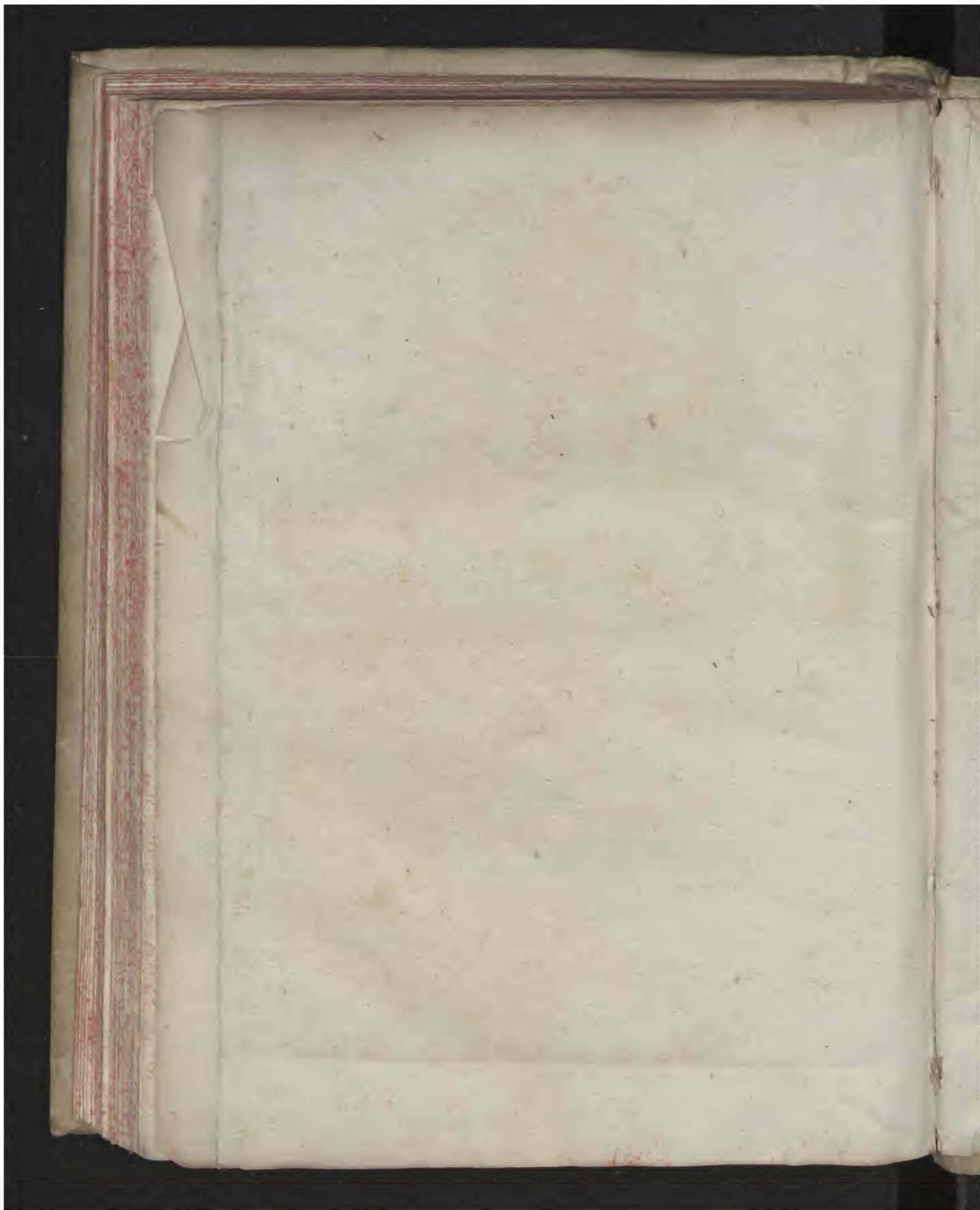


^A ^I ^B ^A ^I
Si metta nel fine, e che nell'aprire si veda in fuori.









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